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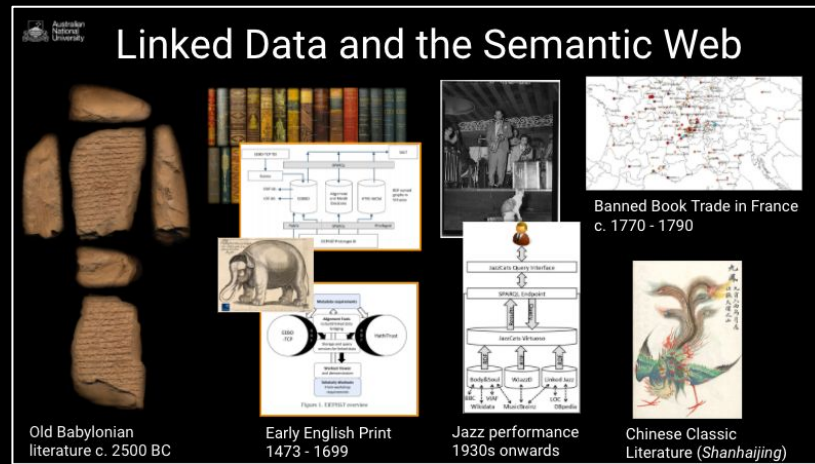
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Copyright in the context
of Software development

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A little about me

- Interdisciplinary researcher, based in CASS
- Linked Data and Semantic Web person
- I try to limit my work as much as possible to
 - Using Open Data
 - Using Open Source Software
 - Providing access to new and additional (Linked) Open Data
- Not an expert on Copyright Law (not a lawyer!), but I work on digital projects with a lot of materials from the creative arts, museums, art, music, galleries, archives...a lot of material and a lot of institutions who care A LOT about copyright restrictions.
- About my slides: underlined in blue are links - please do click on them for further reading, videos, etc.



<https://methodology.anu.edu.au>

This is my Plan...

- Intellectual Property (IP)
- Copyright
- Copyleft
- Copywrong
- Why Copyright is 👍
- Why Copyright is 💩
- Think, Pair, Share activities



That time is now.

IP

And I don't mean Internet Protocol (o_O)

What is IP?

- Property = things you own, things that belong to you
- Intellectual = something relating to your brain and mind, like thinking and reasoning and imagination and problem-solving and creativity...
- Intellectual property = intangible things, such as ideas, that your brain has produced. This could be an idea expressed in painting, a book, a song...many different things. Including a computer program!
- There are different categories of IP, including copyright licences, trademarks, and patents...etc

What is intellectual property?

IP can be anything from a particular manufacturing process to plans for a product launch, a trade secret like a chemical formula, or a list of the countries in which your patents are registered. It may help to think of it as intangible proprietary information. The [World Intellectual Property Organization](#)'s (WIPO's) formal definition of IP is creations of the mind — inventions, literary and artistic works, symbols, names, images and designs used in commerce.

IP is divided into two categories: Industrial property includes but is not limited to patents for inventions, trademarks, industrial designs and geographical indications. Copyright covers literary works like novels, poems and plays, films, music and artistic works, for example drawings, paintings, photographs, sculptures, web site pages and architectural design. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and broadcasters in their radio and television programs.

<https://www.csoonline.com/article/2138380/intellectual-property-protection-10-tips-to-keep-ip-safe.html>

Why should I care?

- IP gives you the right to monopolise (and therefore benefit from!) your intellectual output!
- Which means....You can make \$\$\$!!!!
- Or, you might want to make it publicly available for free and that's totally awesome
- As a student at the ANU, you hold the IP of all your work.
- This means You own it, and not the University
- Which means that, when you leave, you can take it with you, carry on developing it, and possibly even sell it as a commercial product (as long as certain rules are met, for example, that it is not built around an Open Source licence*)

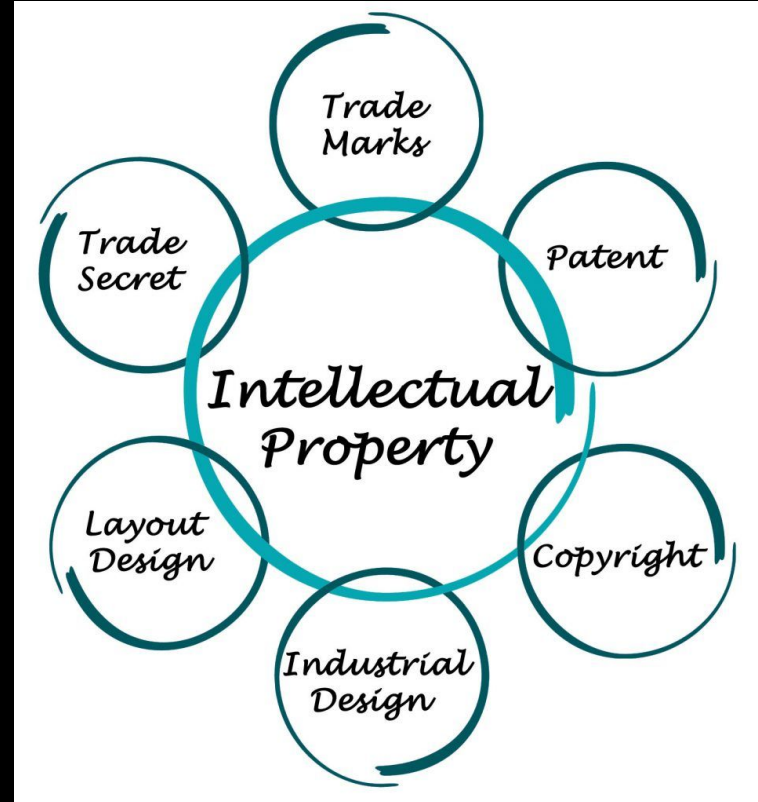


Image from <https://q2dzik4i1e1u6.cloudfront.net/images/lexology/static/a85ad073-c0ca-4799-8d57-f34c6fa92723.PNG>

There are many different aspects to IP

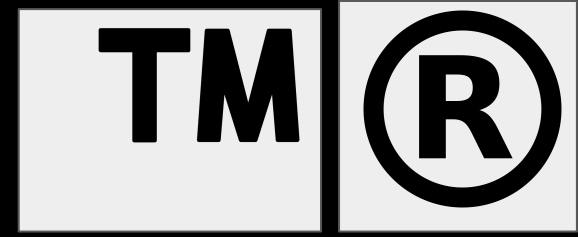
Today, we will just talk about:

- Trademarks and Patents
- Copyright



Trademarks and Patents

Trademarks



- IP over a recognizable sign, design, or expression that identifies a specific product, or brand, or service.
- Trademarks have been around for centuries:
 - The first legislative act concerning trademarks was passed in 1266 under the reign of Henry III, requiring all bakers to use a distinctive mark for the bread they sold.
 - You can read more about it here:
https://en.wikipedia.org/wiki/Assize_of_Bread_and_Ale
- Aim is to protect customers and clients from fakes.
 - Some well-known trademarks in computer science, e.g. FireFox



A medieval baker with his apprentice. The Bodleian Library, Oxford.

Scanned from Maggie Black's "Den medeltida kokboken", Swedish translation of *The Medieval Cookbook* ISBN 91-7712-380-8.

Patents

- Patents differ from Trademarks and Copyright
- Patents = apply to functional inventions: things that have functionality, purpose, mechanism, processes...
- Copyright = applies to any intellectual expression (e.g. the content of a book, not the physical object of a book itself)
- Trademark = a sign a given book is produced by a specific maker, and is of good quality and won't fall apart immediately
- Patent trolling = When someone else tries to assert patent rights over something. Open Source (like publishing your code on GitHub) can help as a preemptive measure!
- You might enjoy reading:
 - <https://www.popularmechanics.com/technology/design/g20051677/patents-changed-the-world/>
 - [BBC: "9 things You Didn't Know Were Invented By Women"](#)

Copyright

What is Copyright?

“Copyright is a form of intellectual property that protects the original expression of ideas.” -

From <https://www.copyright.com.au/about-copyright/>

“Copyright protection is free and applies automatically when material is created.”

- From https://www.copyright.org.au/ACC_Prod/ACC/Information_Sheets/An_Introduction_to_Copyright_in_Australia.aspx

“Australian copyright law applies to actions that take place in Australia, even if the material used was created or first published in another country.”

- From https://www.copyright.org.au/ACC_Prod/ACC/Information_Sheets/An_Introduction_to_Copyright_in_Australia.aspx

“[Copyright works by] providing a financial reward to people who have created content that others find valuable, and lack the skill or time to produce for themselves.

- From <https://www.copyright.com.au/about-copyright/>

Other people's explanations of Copyright

- The [ANU Library provides an overview of Copyright](#),
 - with links and information about how students, researchers, and HDR students should approach copyright. Since you are a student at the ANU, this is material you should know. [There are links](#) to a many other resources as well.
- The [Australian Copyright Council](#)
- The [Copyright Agency](#)
- [Crash Course Introduction to Intellectual Property playlist](#)
 - This is a series of talks on the topics related to IP and copyright by Crash Course, who specialise in educational videos. I am a fan of their work, but these videos are here to give you another insight into the topic. You should not consider them a source you can cite in your assignments.
- Wikipedia has an extensive page on [Copyright](#).
 - I am a fan of Wikipedia but I would encourage you to use this as a source of information for you, not as a source to cite in your assignments.

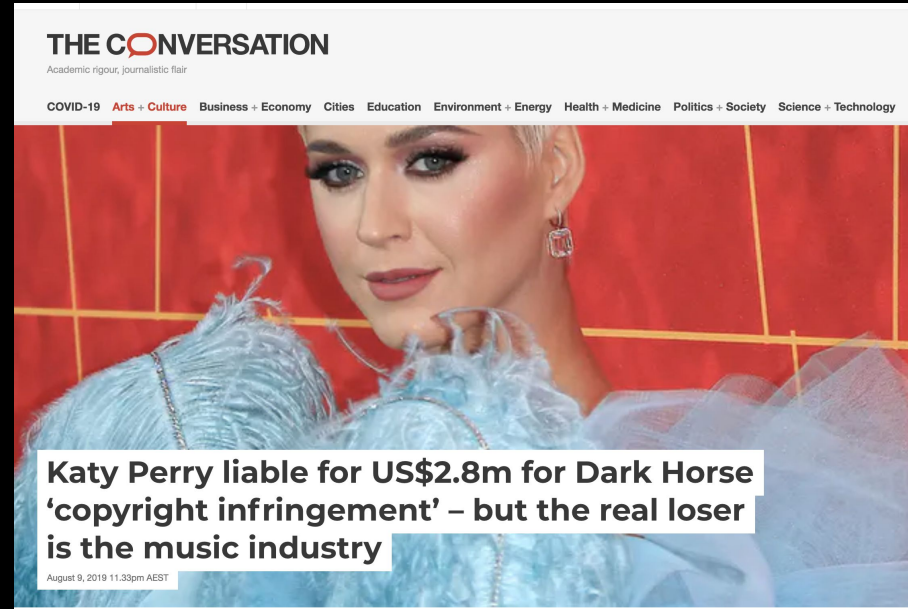
Further readings about Copyright

Read: [Menand, L. \(2014\). Crooner in rights spat: Are copyright laws too strict. *The New Yorker*.](#)

Watch: [Copyright: Forever Less One Day](#)
(Disclaimer: mentions death and people who have died)

Engage with the materials from (for the hardcore): [Australian Copyright Council](#)

Read about: [Katy Perry and the music industry](#)



Summary: What is IP?



COPYRIGHT

Protection is automatically granted to the author for their original, creative or intellectual work.



Works: Books, lectures, dramatic and musical works, cinematography, drawings, paintings, architecture, sculpture, photographs, illustrations, maps, plans sketches etc.



Rights: To distribute copies or phonorecords of the work to the public by sale or other transfer of ownership, or by rental, lease, or lending; To perform the work publicly in person or through audio transmission.



Validity: Registration not mandatory but recommended. Valid through the lifetime of the author and 60 years after his/her death. Owner has protection in most countries.



TRADEMARK

This is a brand element which distinguishes your goods and services from those of your competitors and other traders.



Marks: Word mark, a logo mark or a slogan, shapes, and unconventional marks like colours, sounds, gestures, animation, holograms etc are also registrable as a trademark.



Rights: Exclusive right to use the mark and prevent anyone from using it without permission. It also gives the owner the right to license, assign and sell the mark in return of some compensation.



Validity: 10 years which can be made perpetual, as long as renewed every 10 years. Should be applied separately in every country in which protection is required and has a market in.



PATENT

This concerns obtaining protection for new inventions that are new, original and useful.



Invention will be patented if: Novel or Original, has an Inventive step (non-obvious) and has some Industrial application.



Rights: Exclusive authority over the patented invention, right to exclude others and exploit the patent and earn from it.



Validity: Patent protection is territorial right and therefore it is effective only within the territory of India. Separate patents required to be filed for each country where protection is required. Patent is valid for period of 20 years after which it goes in public domain.

Summary: And why should I care?

Copyright, Patent, and Trademark

	Copyright	Patent	Trademark
Meaning	Protection of original ideas and works	IP right granted by government	Sign, logo that distinguishes a product, service
Rights of Owner	Exclusive rights of reproduction and distribution	Legal rights to exclude unauthorized uses	Legal rights to exclude unauthorized uses
How to obtain	No need to register ✓	Apply to specific country (20yrs)	Apply to specific country (10yrs)
Common Example	Books, music, movies	Jet engine design, medicine	Pepsi, McDonald's logo
Tech Example	Java API	MPEG, 5G, Wifi	Facebook, Facebook like logo

Copyright


Copyleft

- Guarantee user freedom
- Prevent developers from locking-in or restricting users
- Require that derivatives are shared in the same way (i.e. you can't take something open and then build on that to make something which is proprietary → you cannot make \$\$\$ from someone else's free code)
- GPL (GNU General Public Licence)
- GLPv3
- So these are more from the perspective of the user (not the developer)

Copyleft


- Conceptually similar to the Creative Commons Share-alike Licence.
- The copyright of the original is transferred to the new product.
- For example, you can't take Open Source software (or code from GitHub), and use it to build a commercial product
- But you can choose to let other people use and edit your code.

<https://creativecommons.org/licenses/by-sa/2.5/au/>



Attribution-ShareAlike 2.5 Australia (CC BY-SA 2.5 AU)

This is a human-readable summary of (and not a substitute for) the [license](#), [Disclaimer](#).




You are free to:


Share — copy and redistribute the material in any medium or format


Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.



Under the following terms:

 **Attribution** — You must give [appropriate credit](#), provide a link to the license, and [indicate if changes were made](#). You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

 **ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the [same license](#) as the original.

No additional restrictions — You may not apply legal terms or [technological measures](#) that legally restrict others from doing anything the license permits.

Notices:

You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable [exception or limitation](#).

No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as [publicity, privacy, or moral rights](#) may limit how you use the material.

Examples of Licences you might know well already

- GitHub (over 30 different options, because like Data Standards, everyone wants to develop their own, I guess):
<https://docs.github.com/en/free-pro-team@latest/github/creating-cloning-and-archiving-repositories/licensing-a-repository>
- STEAM
<https://store.steampowered.com/curator/6942691-License/>
and <https://www.gnu.org/philosophy/free-sw.html>



Examples of Licences you might know already

Examples

- GPL
 - does not allow you to add any additional restriction
 - cannot combine the code that has more restrictions (not compatible w. Apache 2.0)
- GPLv3
 - Add patent grant clause
- LGPL (Lesser)
 - allows you to use and integrate a software component released under the LGPL into their own software

Copywrong

Copywrong

- Unethical or illegal use of material
- Disregard for copyright law
- Misuse and abuse of copyright law
- Use and/or distribution of material even when you're not supposed to
- Incredibly common!

MYTH

If it's on the internet, anyone can use it

FACT

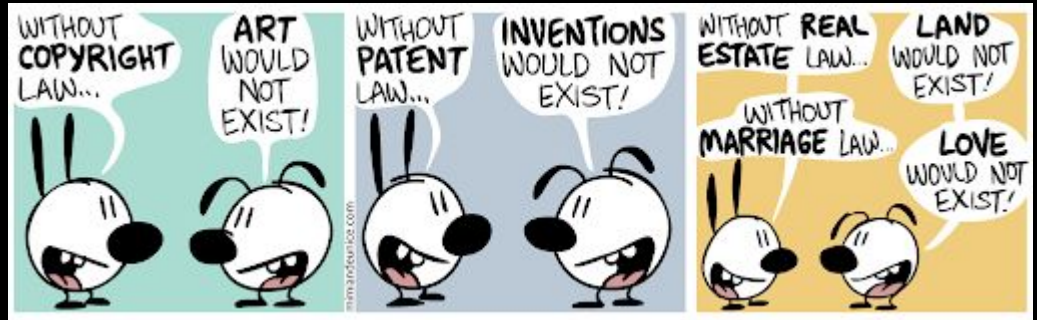
Copyright is not 'waived' when you publish text or images on the internet. You can decide how you would like people to use your online content. Guidelines for using online text and images usually appear on a website's [terms of use](#) page.

From
<https://www.copyright.com.au/about-copyright/copyright-myths/>

Benefits of Copyright

Benefits of Copyright 1/2

- Protects people whose income is dependent on being able to monetise on their intellectual or creative output e.g. authors, musicians, artists, etc.
- Means that someone can't just take something you made and make money off it (e.g. by stealing a piece of art you made and selling it off as their work)
- Some argue that this means that it fuels creativity and drives the development of new things...
 - But I do not agree!



<https://mimiandeunice.com/category/ip/>

Benefits of Copyright 2/2

- Infringements on copyright can be particularly damaging to Early Career people (e.g. junior scholars or those writing their first novels), who have fewer opportunities to defend their rights if their ideas are copied and reproduced by someone else. A powerful publisher (such as Elsevier!) can help defend the author's case and even take legal action.
- Copyright is automatically assigned to you as the creator, you do not need to register it separately. If you write some code and publish it online, for example, if you can prove it is yours, you can claim copyright (If You Want To).

As a person in academia (student, lecturer, professor, anyone)

- If you choose to publish your academic work (for example, you write code, or make a project, and then write it up as an publication for a conference or a journal), be very careful to read the different options about licences, and copyrights that different publishers offer. This one is the one from ACM. The wording is not always that clear! Which one would you choose?

How would you prefer ACM to handle your rights?

- ☐ **Copyright** - Authors who want ACM to manage the rights and permissions associated with their work, which includes defending against improper use by third parties, can use ACM's traditional copyright transfer agreement.
- ☐ **License** - Authors who prefer to retain copyright of their work can sign an exclusive licensing agreement, which gives ACM the right but not the obligation to defend the work against improper use by third parties.

proceed

When Copyright is 🍌

- <https://www.abc.net.au/news/2020-08-21/ken-wyatt-encourages-afl-fans-to-wear-aboriginal-flag/12580968>
- Here is a podcast on the Fight Over the Aboriginal Flag:
<https://podcastaddict.com/episode/111832709>
- When copyright is used to monopolise a thing that should be shared/ be in the public domain.
- When copyright is used by corporations to monetise on a thing that was once free (e.g. Disney owns rights to “Alice in Wonderland” because of the films in 1951 and 2010. Copyright is not held by the family or estate of its original author, Lewis Carroll).
- When publishers (like Elsevier!) claim copyright and licencing rights over the work of academic scholars, whose work should be freely and openly available to everyone!

Key points:

- In late 2018, a new non-Indigenous business secured the exclusive licence to reproduce the Aboriginal flag on clothing
- Since then, WAM Clothing has threatened legal action against several organisations
- A copyright expert says the Government could buy the licence to ensure community access to the flag

From

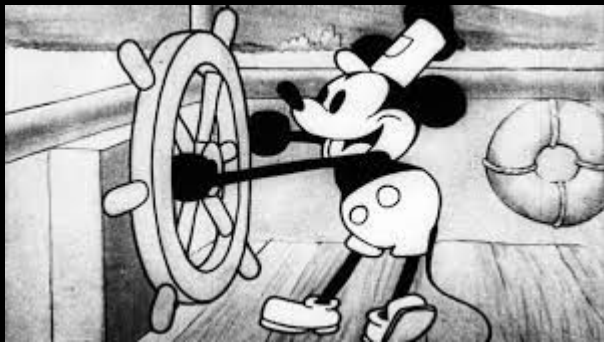
<https://www.abc.net.au/news/2019-06-11/new-licence-owners-of-aboriginal-flag-threaten-football-codes/11198002>

Disney

If you didn't do so before, go read: [Menand, L. \(2014\). Crooner in rights spat: Are copyright laws too strict. The New Yorker.](#) At least the bit about Disney!

On another stratum of economic value, Mickey Mouse, who made his debut in 1928, in an animated picture called “Steamboat Willie,” won’t come out of copyright until 2024. The Disney Company, which owns rights to a number of valuable but, by the standards of the entertainment industry, ancient cartoon characters, lobbied hard to get the Bono Act passed.

For an overview of the Bono Act, or the Mickey Mouse Protection Act, see https://en.wikipedia.org/wiki/Copyright_Term_Extension_Act



And Watch: [Copyright: Forever Less One Day](#)
(Disclaimer, mentions death and people who have died)

The Bono Act/Copyright Term Extension Act/the Mickey Mouse Protection Act

- It's a bit more complicated than this but essentially the Act extended the rights of copyright holders in USA

life of the author plus 50 years



life of the author plus 70 years

75 years from publication



95 years from publication

100 years after creation



120 years after creation

- Sounds OK? Remember this was accomplished by a number of very wealthy individuals lobbying the U.S. Congress...So it's just about \$\$ and power



https://unsplash.com/photos/_S5N5aAYWNo

OMG this is boring!
Can't I just put my
code on GitHub and
that's it?!?!?

Having no licence

- You'd think this was the most open way to share and publish data but actually it is not.
- Remember copyright is assigned automatically, and you don't need to apply for it.
- No licence = technically only You have the right to edit, modify, expand, etc on that code (even if other people can)
- Remember: Just because it is online, doesn't mean it is OK to use it! So you should choose a licence that means others are free to use it. And you should only use code that has been categorised as open!

Good things about Permissive Licenses

- Can grant freedom to other developers to use your code,
- Reuse almost always requires acknowledgement and attribution. You should do this anyway, because it is the morally and ethically right thing to do.
- You can build on other people's work, rather than everyone creating code for the same task over and over.
- But not everyone likes the idea!

Examples of things with Permissive Licenses

- MIT/Expat/X11, ISC/n-clause BSD (short descriptions)
- Apache 2.0 (lengthy description)
- There is also the Grant of Patent Licence, created to counter the sort of Patent Trolling - we talked about both of these before!

Creative Commons

The screenshot shows the Creative Commons website. At the top is an orange navigation bar with the Creative Commons logo, a search bar, and links for Global Network, Newsletters, Store, Contact, and social media. Below this is a grey bar with the text 'Help us build a vibrant, collaborative global commons' and a green 'Donate Now' button. The main content area has a white background with the heading 'Share your work'. Below this is a blue box titled 'Choose a license' which contains a flowchart with three steps: 'Choose Features' (represented by a hand icon), 'Optional Info' (represented by a document icon), and 'Get License' (represented by the CC logo icon). A 'Get Started' button is at the bottom right of the blue box. To the right of the blue box are two sections: 'Recent Posts' with three links and 'In this section' with four links.

Search for CC images | Global Network | Newsletters | Store | Contact |

creative commons | **Share your work** | **Use & remix** | **What We Do** | **Blog**

Help us build a vibrant, collaborative global commons **Donate Now**

Creative Commons > Share your work

Share your work

Use Creative Commons tools to help share your work. Our free, easy-to-use copyright licenses provide a simple, standardized way to give your permission to share and use your creative work—on conditions of your choice. You can adopt one of our licenses by sharing on a platform, or choosing a license below.

Choose a license

This chooser helps you determine which Creative Commons License is right for you in a few easy steps. If you are new to Creative Commons, you may also want to read [Licensing Considerations](#) before you get started.

Choose Features → **Optional Info** → **Get License**

Get Started

Recent Posts

- ▶ [Creative Commons Is Now Leading the Open COVID Pledge —Here's What That Means](#)
- ▶ [Meet the Program Committee Making the 2020 CC Global Summit a Reality!](#)
- ▶ [Introducing Our Google Season of Docs 2020 Participants](#)

In this section

- ▶ [CC Licenses and Examples](#)
- ▶ [Licensing considerations](#)
- ▶ [Public domain](#)
- ▶ [Places to share](#)

“Creative Commons is a nonprofit organization that helps overcome legal obstacles to the sharing of knowledge and creativity to address the world’s pressing challenges.”

<https://creativecommons.org/about/>

- I love CC but I guess not everyone agrees. One reason is that it can be a bit vague in places and some consider it difficult to interpret.

Can I change the licence later?

- I asked <https://www.copyright.com.au/about-copyright/copyright-myths/>

(11:59:09)

Terhi

Right, so let's assume a scenario where I don't assert copyright (but it applied automatically) and then later on I want to make a profit, that's all fine, right?

However, let's say I use an open licence (like a Creative Commons Attribution Only) and I later on decide I want to make money off my IP, I can just change the licence, right? How does that affect people who have used it while the licence was still free? I'm thinking particularly in the context of software development and code, which someone else might have incorporated into their project, etc

(12:00:20)

Johanna Roberts

I believe you can change the licence however it may be best to seek legal advice, which we don't offer here

(12:00:28)

Johanna Roberts

The Australian Copyright Council (<https://www.copyright.org.au/>)

(12:00:44)

Johanna Roberts

or Arts Law Association (<https://www.artslaw.com.au/>) should be able to assist

(12:01:02)

Terhi

Fantastic, thank you so much for your help! Hope you have a great day!

In Summary

- Copyright can protect you as the person who has created code.
- Open Licences are great for the advancement of Computer Science, for the sharing of knowledge, and just for being a nice person.
- Copyright law can be complicated and change between countries. As an ANU student, you should know what your rights and responsibilities are: [ANU Library provides an overview of Copyright](#). For example, who owns the IP of your code once you graduate??? (You do, don't worry)
- Always always always attribute the creator of the code you've used, regardless of their licence. This is especially true in your assignments. It is better to cite, reference, and attribute too much, than not enough!

Activities

Think, Pair, Share

Which one of the topics covered today affect you most as a person who

- writes new code
- buys things (like hardware!)
- is expected to contribute to the academic community (e.g. publish, use Github)
- has aspirations to work for industry and needs portfolio
- has an international life or aspirations for an international life

Think, Pair, Share

Contrast Copyright, Patent, Trademarks

- When is Copyright relevant to you?
- When should you think about Patents?
- Why would you care if something is Trademarked?

Think, Pair, Share

Consider different kinds of stakeholders.

How would these approach Copyright differently?

- Student at the ANU
- Huge international publisher (e.g. Elsevier)
- Mammoth international conglomerate (Alphabet, Fox Corporation)
- A struggling artist

Think, Pair, Share

Ethical considerations

- Is Copyright fair?
- Is Copyright neutral?
- Are there scenarios where Copyright should apply?
- Are there scenarios where Copyright should not apply?
- Is there any point to discussing Copywrong?

Remember that Copyright is applied as a default!



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Copyright in the context of Software development

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