



Licensing of research outputs



Federico Bianchini
ELIXIR Norway

Objectives

? Questions

- **What is intellectual property/copyright/derivative work?**
- **What is free software/data?**
- **What types of licenses exist?**

! Objectives

- **Get familiar with terminology around licensing**
- **Discuss what is and is not derivative work**

Intellectual property rights (IPRs)

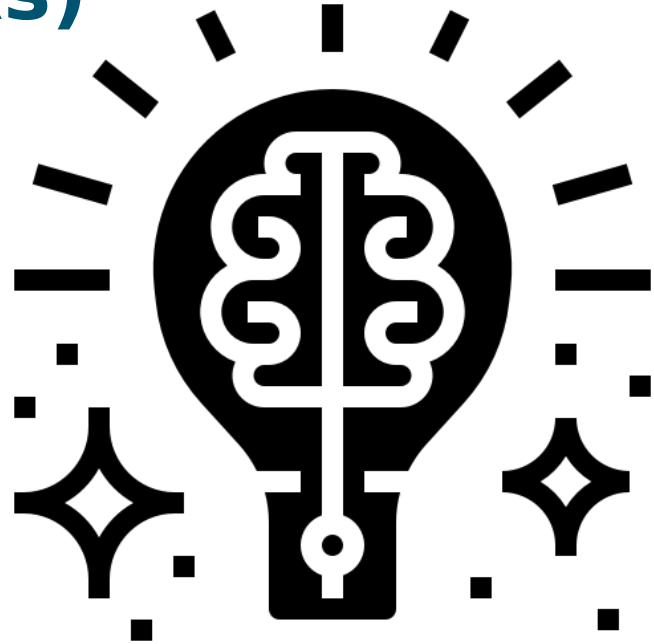
Patent: Protects novel, non-obvious, inventions

Copyright: creative products: software, writing, figures, photos, some datasets, this presentation

Database directive

Trademark: Protects a name/brand

Trade Secrets



CC-BY 3.0
Wichai.Wi

Intellectual property rights (IPRs)

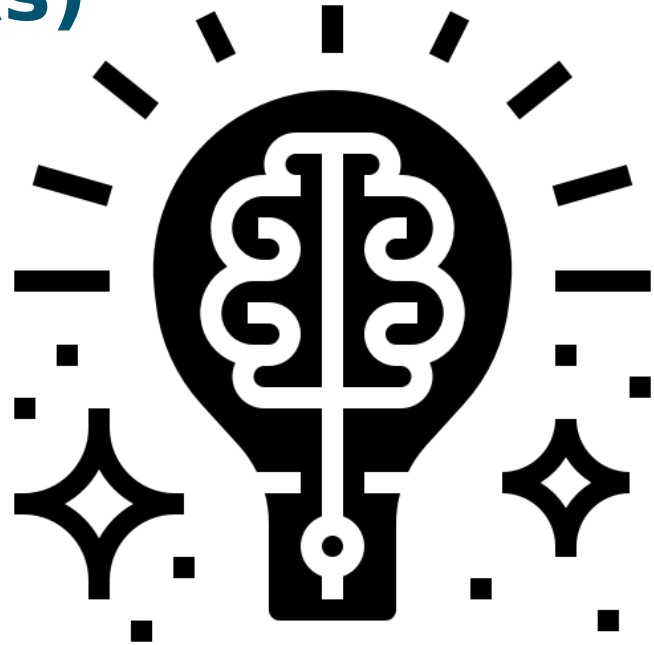
Patent: Protects novel, non-obvious, inventions

Copyright: creative products: software, writing, figures, photos, some datasets, this presentation

Database directive

Trademark: Protects a name/brand

Trade Secrets



CC-BY 3.0
Wichai.Wi

IPR often regulated in work contract

Patents in Europe

Active process

No prior disclosure

Apply only in limited geographical scopes

Fees (varying by business size and scope)

Apply for max 20 years after application

Software patents in Europe

(it's complicated)

The European Patent Convention states that software is not patentable. in contrast with e.g. the US

The European Patents Office (EPO) grants software patents by declaring them as "computer implemented inventions".

Erosions: VICOM 1986, COMVIK 2002, ML guidelines 2018, Bentley 2021

Copyright in Europe

Creative products: software, writing, figures, photos,...

Details for software: Directive 2009/24/EC

Applies by default

Does not apply for facts

Economic rights vs. moral rights

Author lifetime + 70 years

[Commons:Copyright rules by territory/Norway](#)

<https://lovdata.no/pro/#document/NL/lov/2018-06-15-40>

<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009L0024>

<https://lovdata.no/pro/#document/NLX2/avtale/avt-1992-05-02-1-v17>

Example WIPO: Genetic data

Raw sequence does not have copyright

Processed data might have

Patenting unaffected

**Special consideration regarding traditional knowledge
(Nagoya protocol)**

EU Database directive

Defined additional (*sui generis*) IPR for:

“collection[s] of independent works, data or other materials [that does not fall under copyright] arranged in a systematic or methodical way and individually accessible by electronic or other means”

15 years by default

Licensing

A licensor may grant a license under intellectual property laws to authorize a use (such as copying software or using a patented invention) to a licensee, sparing the licensee from a claim of infringement brought by the licensor.

Why should I license my research outputs?

Legal security for users (A)

Requirement from the funding bodies

Increase of willingness to reuse outputs (R)

Allows deposition/mirroring in 2nd databases (F)

Concepts in open licenses



Waive all your interests that may exist in your work

Copy left:



Credit for the original creation



License new creations under identical terms



Non-commercial



Cannot be shared with others in adapted form



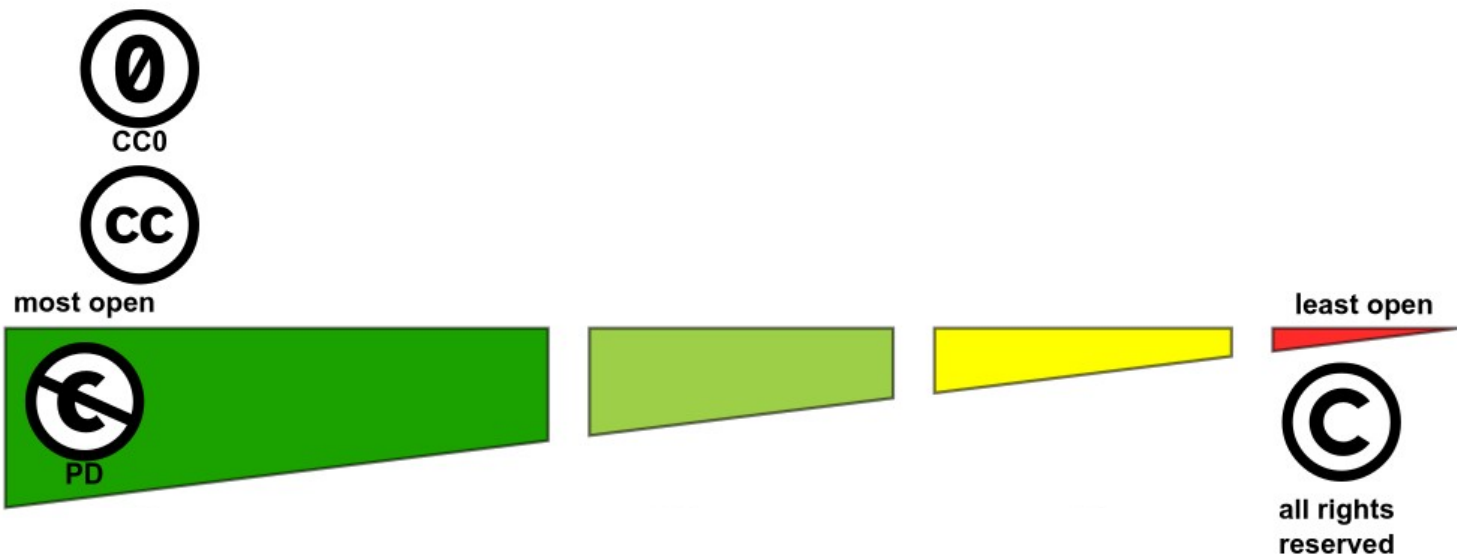
most open

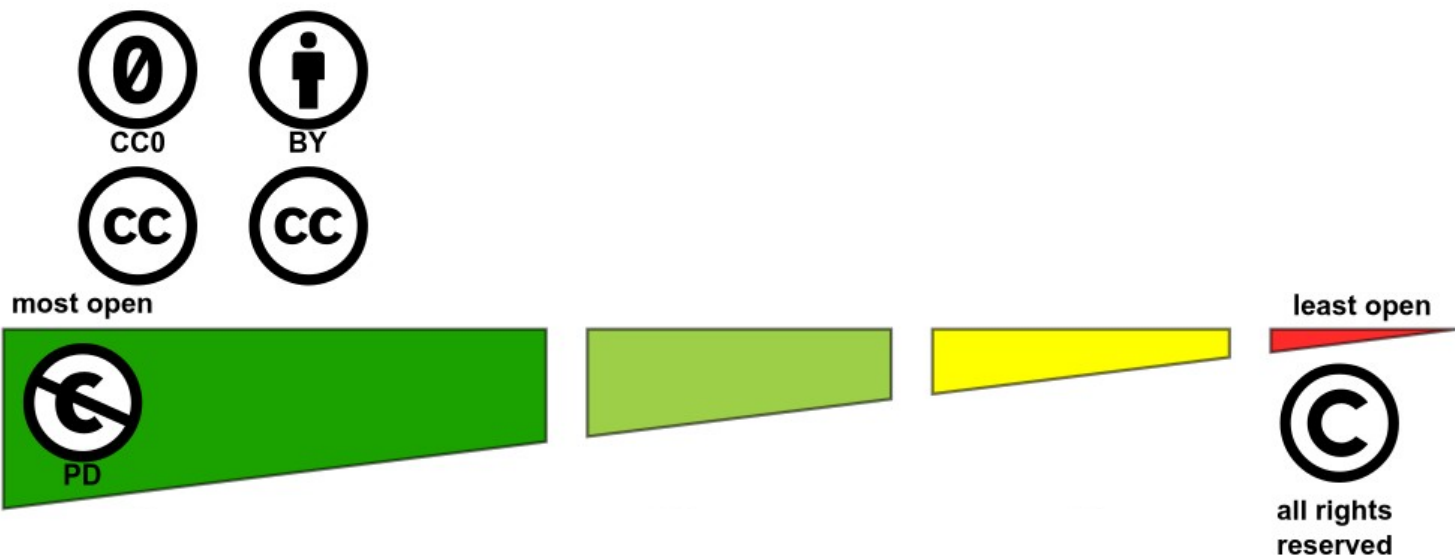


least open

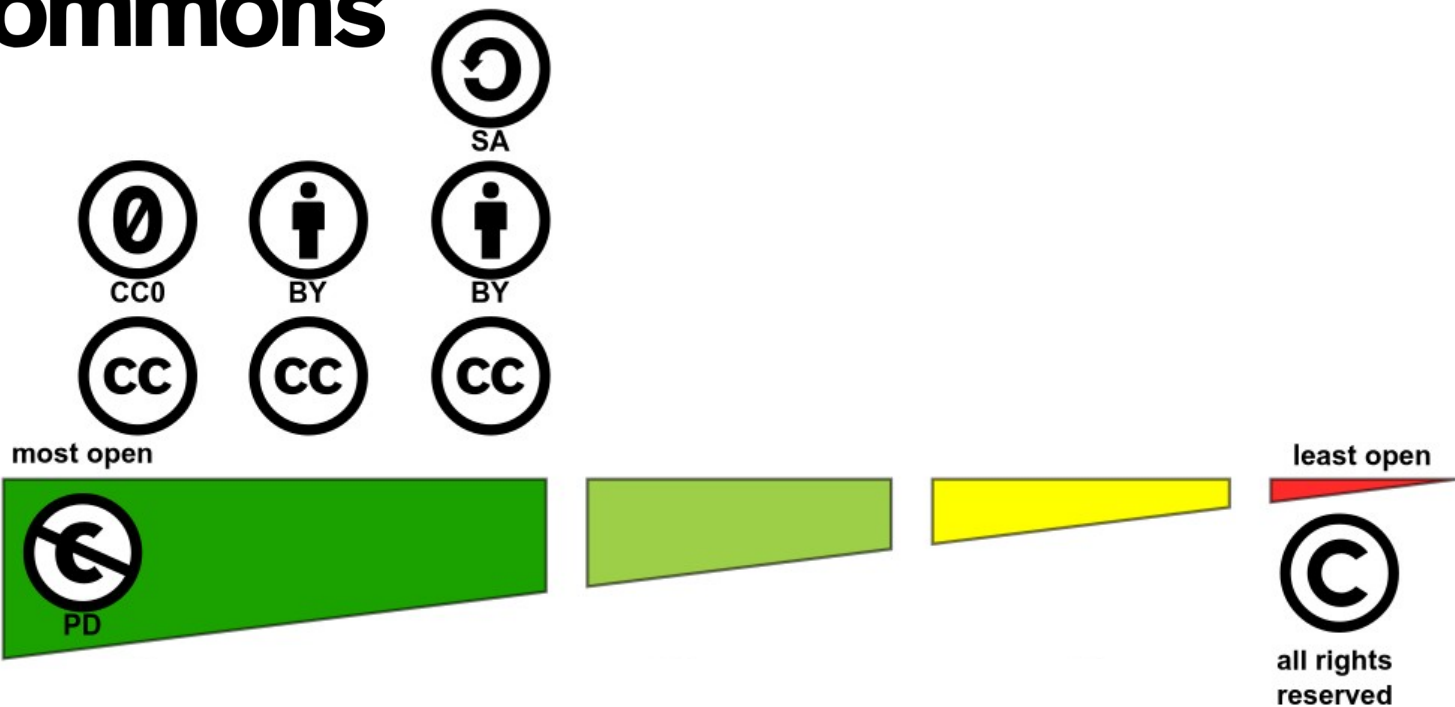


all rights
reserved

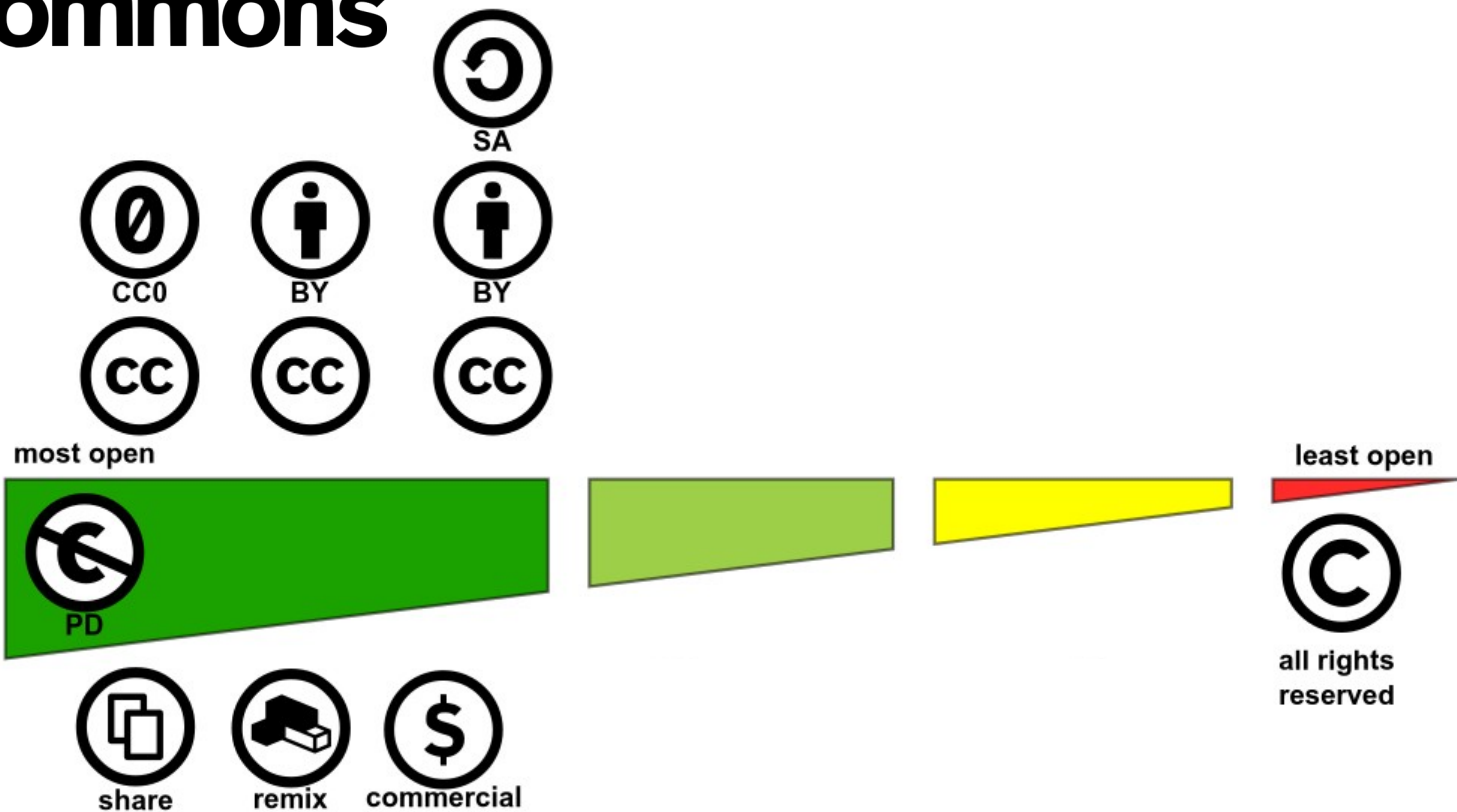


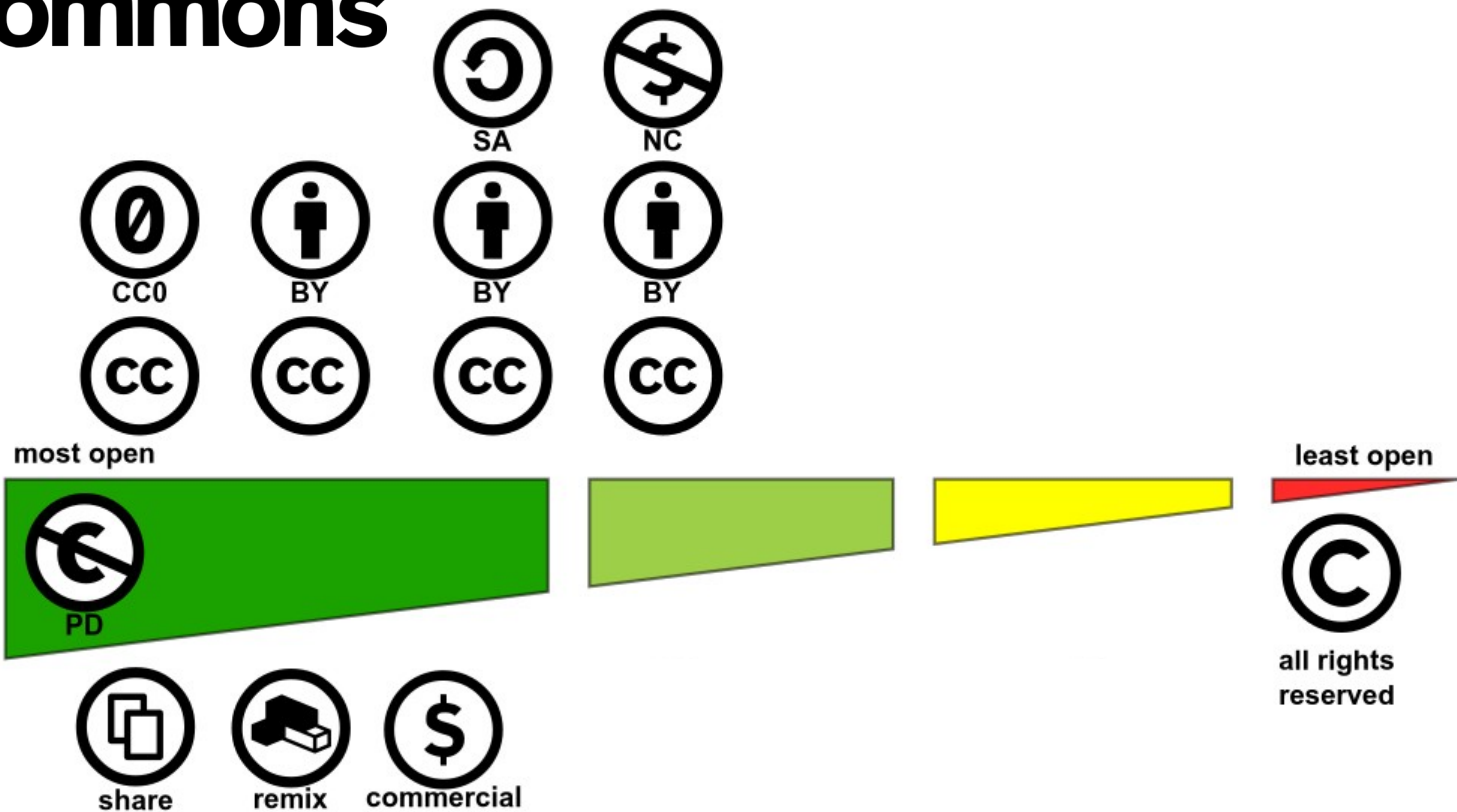


 creative
commons

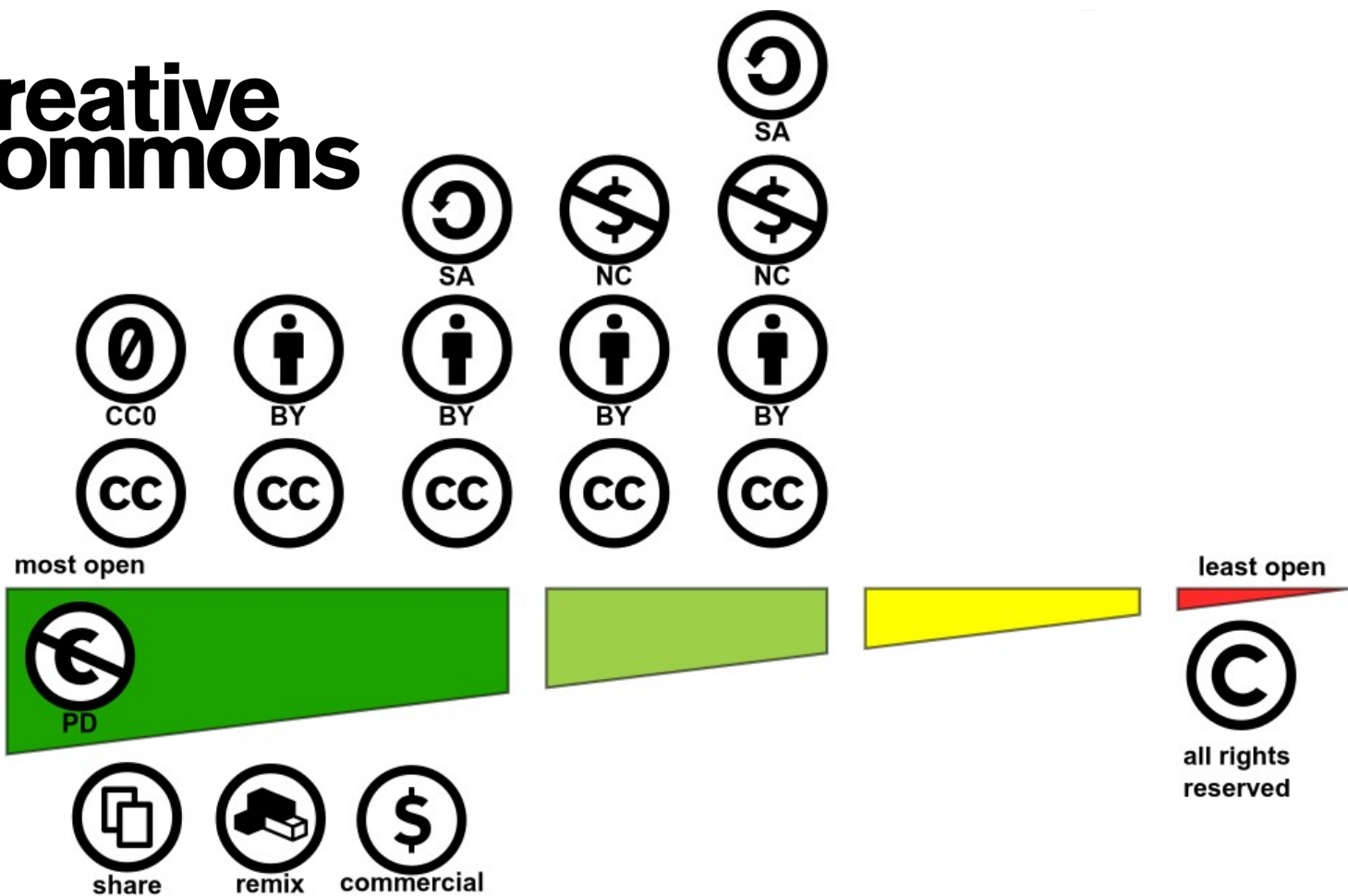


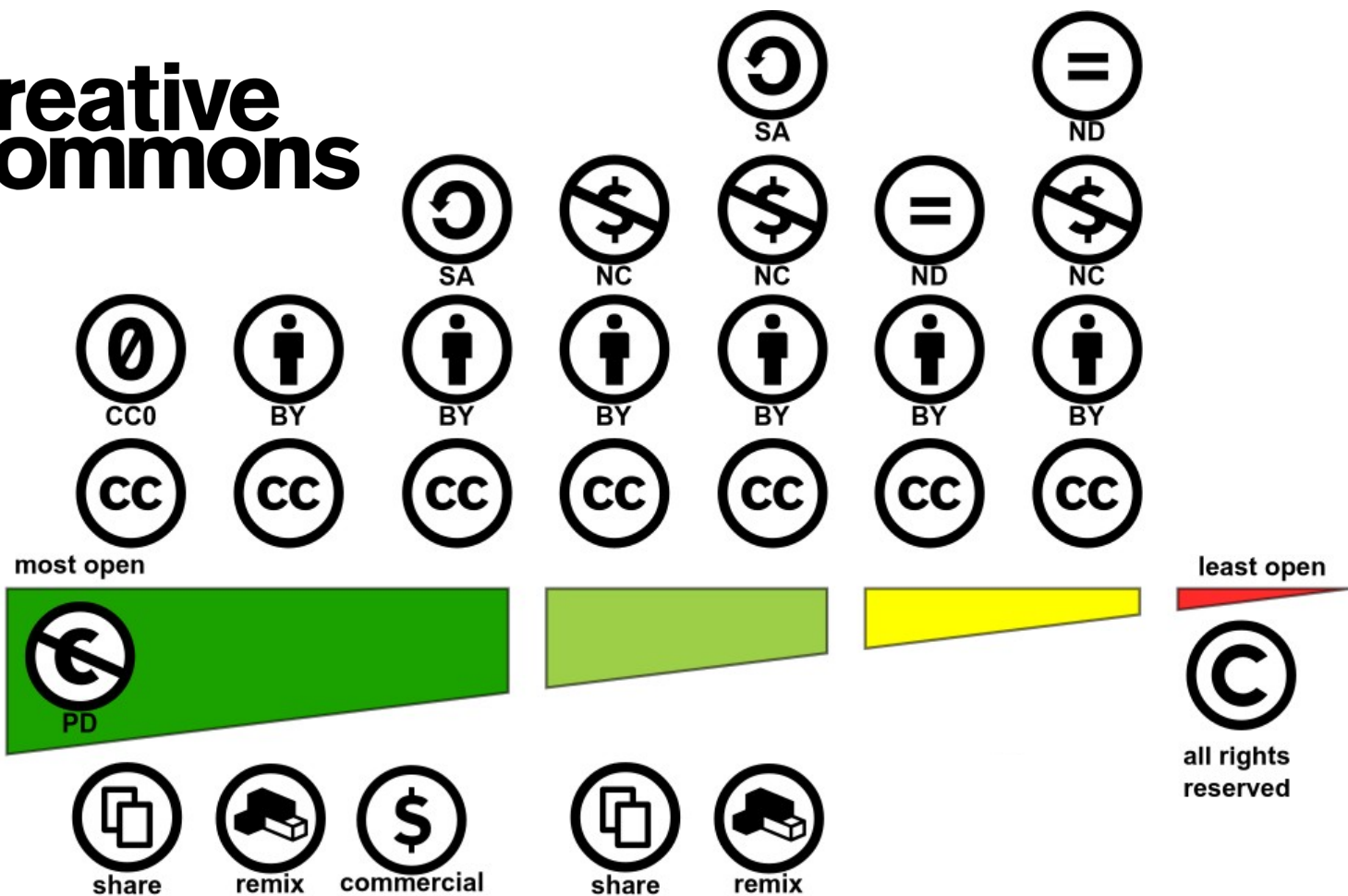
 **creative
commons**

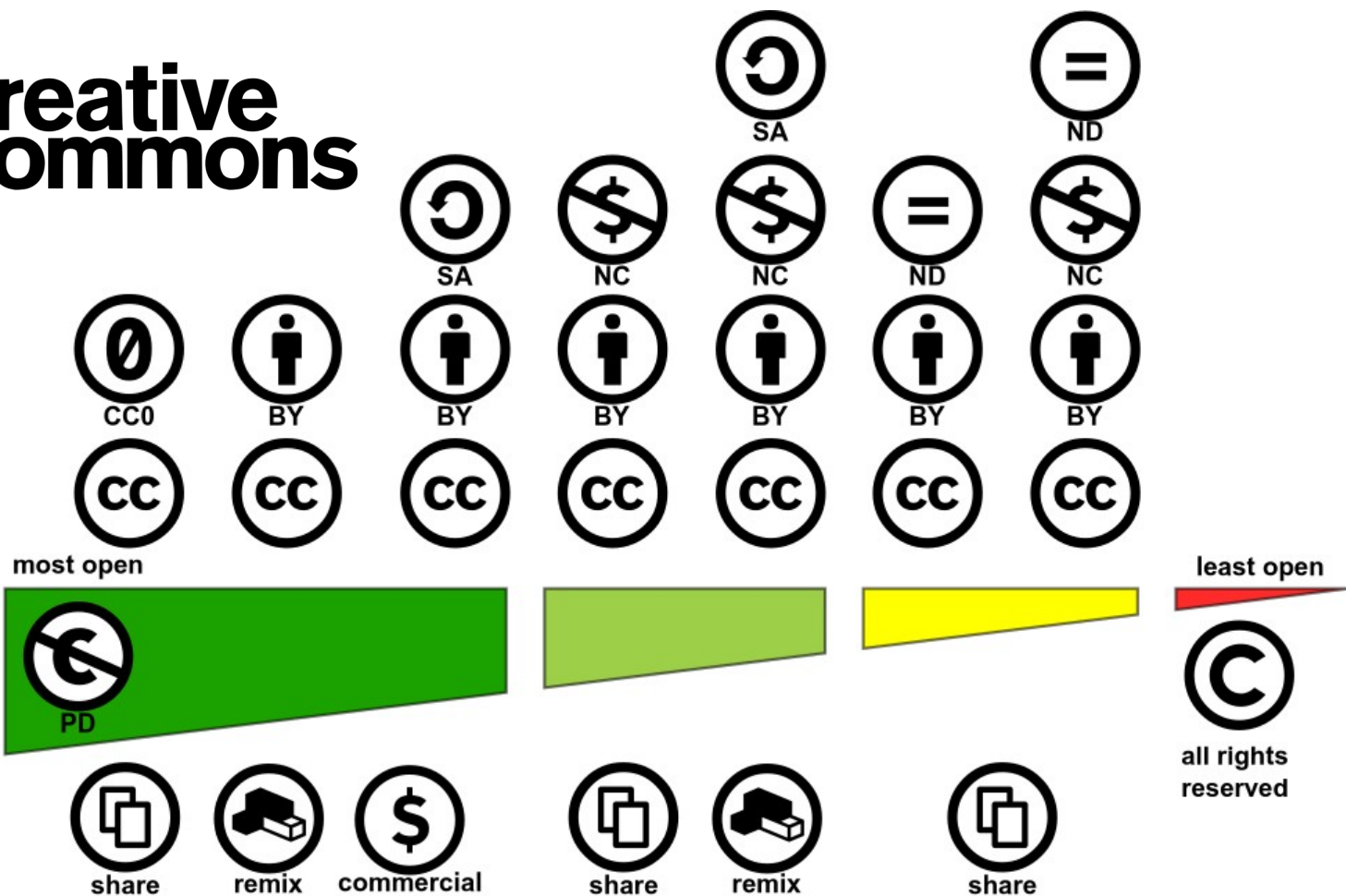




 **creative
commons**









Legal code, harmonized for national/international law





**Legal code, harmonized for
national/international law**

**Human readable,
understandable text**



**Legal code, harmonized for
national/international law**

**Human readable,
understandable text**

**Machine readable html tag
attachable to metadata**



Who to use this in practise?



Creative Commons - **What is licensed?**

Nathan Yergler, Alex Roberts - **Who is to be attributed?**

Licensed to the public under [CC BY 3.0 Unported](#) - **Which license?**

Challenges



Multiple Attributions for several sources (license stacking)



Multiple incompatible source licenses



Legal commercial definition (e.g. use by journals)



Unintentional restrictive

Open Source Software licenses

Special considerations for Software

Liability

Warranty

Modifications

Network use = Distribution?



Open Source Software licenses





Open Source Software licenses



**MIT
license**

**GNU
AGPLv3**





Open Source Software licenses

BSD
←————→
licenses



MIT
license

GNU
Apache **LGPLv3**
2.0

GNU
AGPLv3

GNU
GPLv3





Open Source Software licenses

← **BSD** →
licenses



MIT
license

Apache 2.0

GNU
LGPLv3

GNU
AGPLv
GNU
GPLv3



<https://opensource.org/licenses>
<https://choosealicense.com/>



GitHub

Icons [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

<https://creativecommons.org/>

weak

Copyleft

LGPL
MPL

Permissions

- Commercial use
- Distribution
- Modification
- Patent use
- Private use

Conditions

- Disclose source
- License and copyright notice
- Same license (library)
- State changes

Limitations

- Liability
- Warranty

strong

Copyleft

GPL
AGPL

Permissions

- Commercial use
- Distribution
- Modification
- Patent use
- Private use

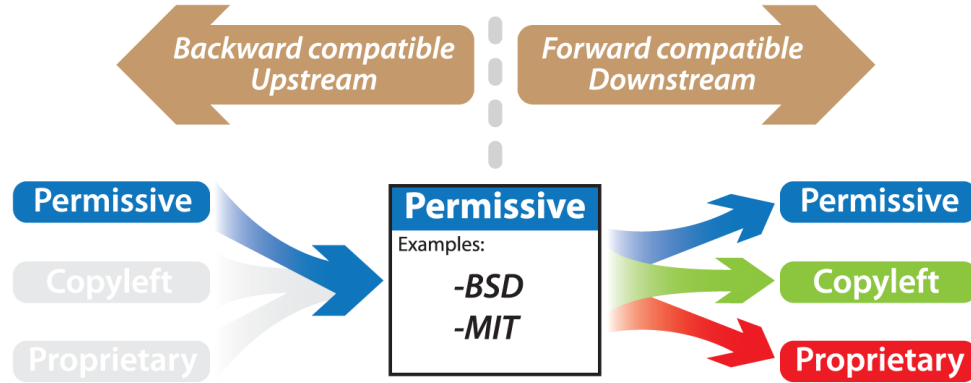
Conditions

- Disclose source
- License and copyright notice
- Same license
- State changes

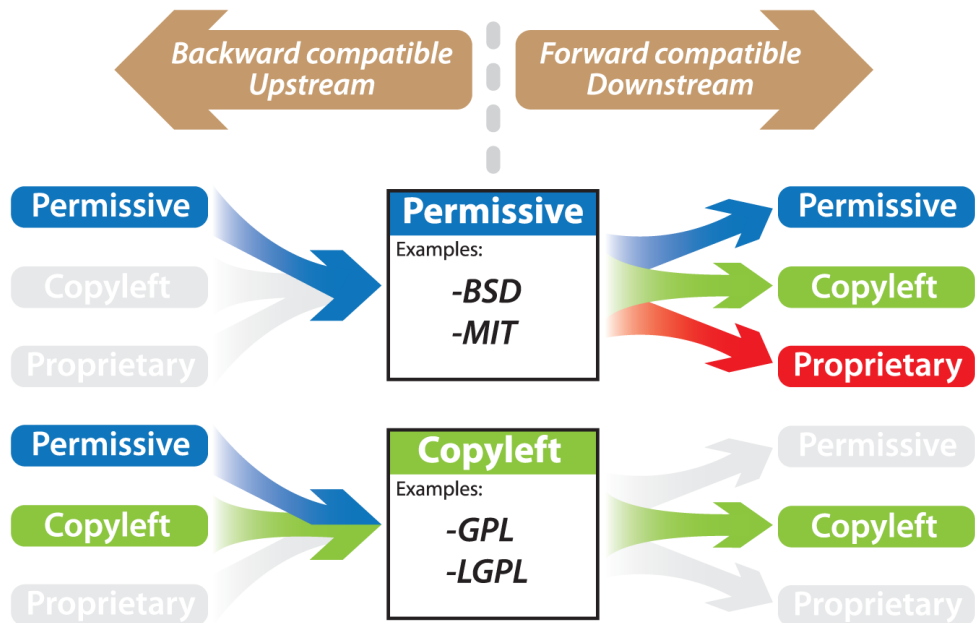
Limitations

- Liability
- Warranty

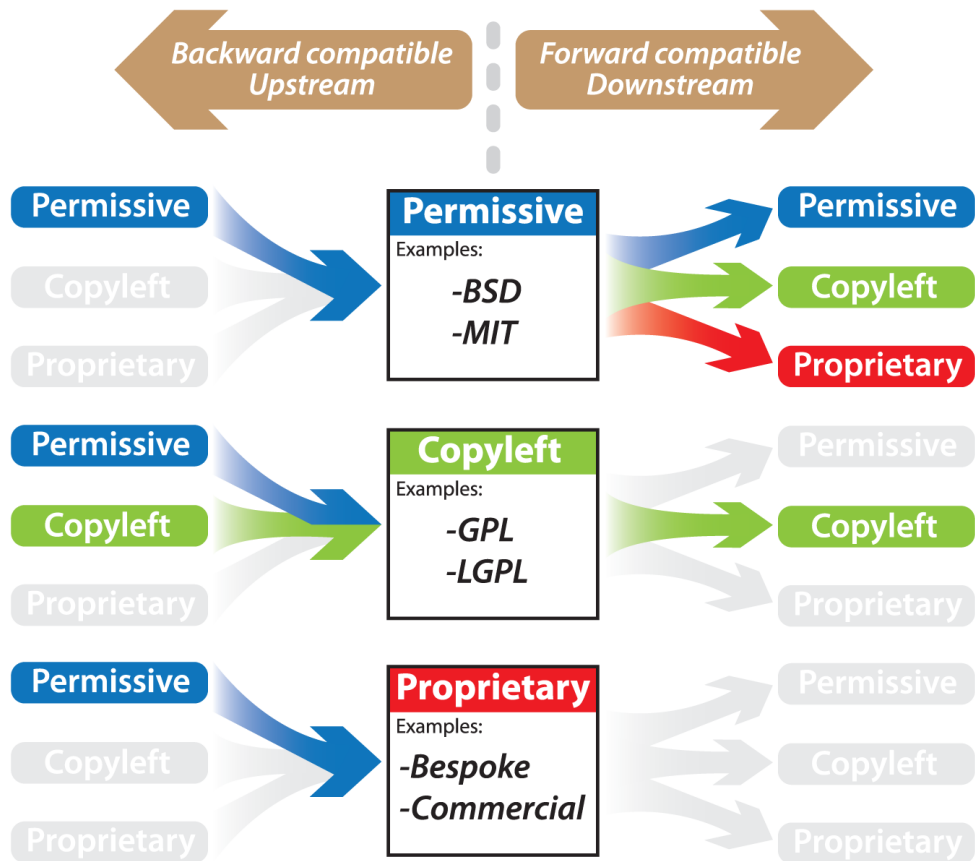
Open Source Software



Open Source Software



Open Source Software



DO

Always add a (standard) license

Ideally: File level license indication

Be aware of the IPR of the code you (re-)use

DON'T

Invent your own license

Compliance monitoring

Costs of data management

Data analysis

Data brokering

Data management coordination

Data management plan

Data organisation

Data security

Data sensitivity

Data provenance

Data publication

Data quality

Data storage

Data transfer

Documentation and metadata

Ethical aspects

Existing data

GDPR compliance

Identifiers

Licensing

Machine actionability



Link to RDMkit:

<https://rdmkit.elixir-europe.org/>

Next:

[Digital Life 2021: Know-how workshop on IPR in digital biotech](#)

[Data life cycle: Sharing | RDMkit](#)

[Your tasks: Licensing | RDMkit](#)

[EUDAT license chooser for data and software](#)

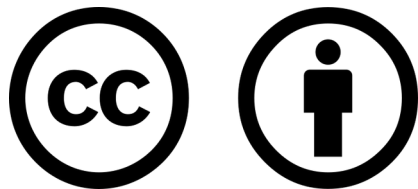
[Choose a License](#)

[Licenses & Standards | Open Source Initiative](#)



CODE REFINERY

Thank you!



Except where otherwise noted, this work is licensed under a

[Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

- <https://creativecommons.org/licenses/by/4.0/>