



I WANT TO DISTRIBUTE MY SOFTWARE DEVELOPMENTS. HOW TO DEFINE AN OPEN LICENSING STRATEGY?

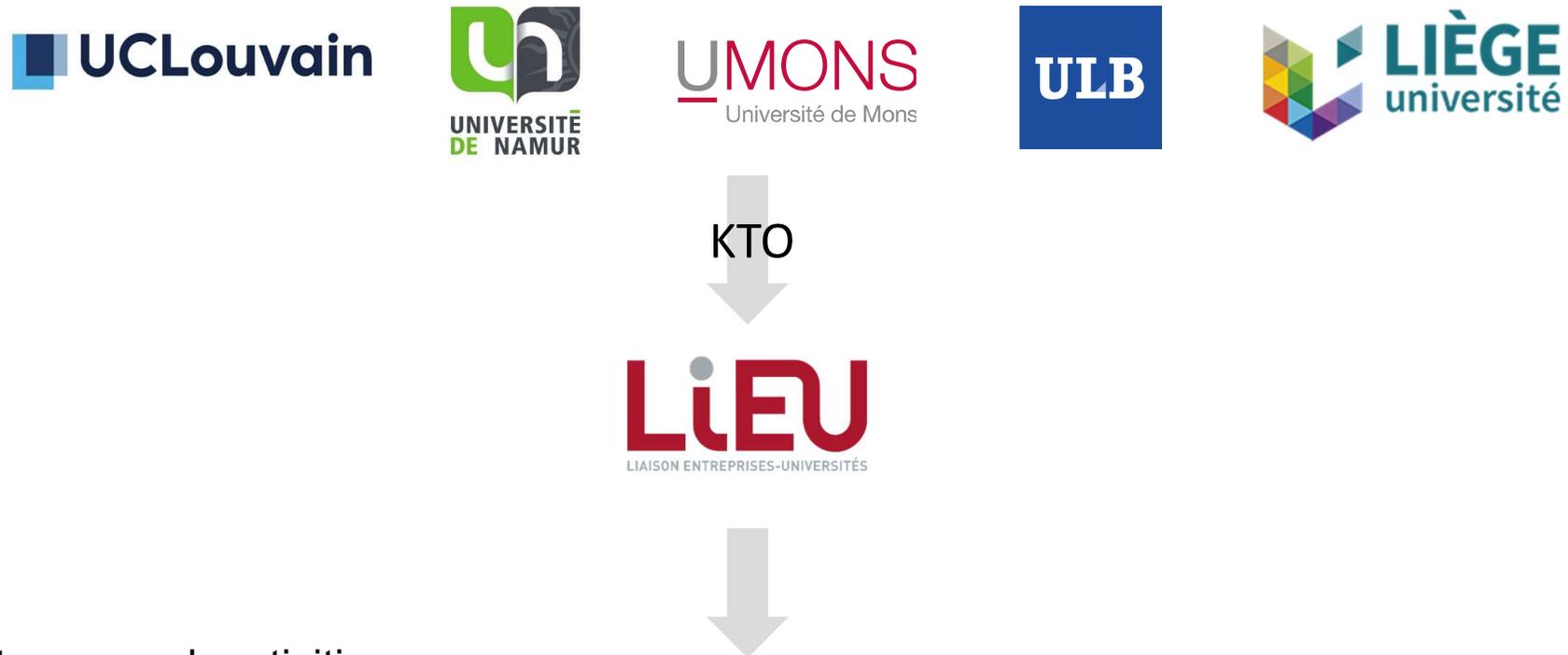
11th CÉCI Scientific Meeting, April 25th

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UCLouvain - Louvain Technology Transfer Office
LIEU – Digital technologies Working group



Knowledge Transfer Offices (KTO)



Promote research activities

Stimulate links between research and industry / enhance partnerships with external partners

Support the innovation process / transfer research results to society

Agenda

- **Motivation:** Why define a software strategy?
- **Intellectual property (IP) :** Why discuss about Copyright?
- **Licensing:** Why a license? Which one?
- **In practice:** What impacts a licensing strategy?



Why define a software strategy?

What happens when you use an off-the-shelf code?

You use it to gain time but (perhaps) without asking if you can or checking ownership, confidentiality rights and so on...

Do you wish to appear as a contributor when your code is distributed?

It is obvious! Right?

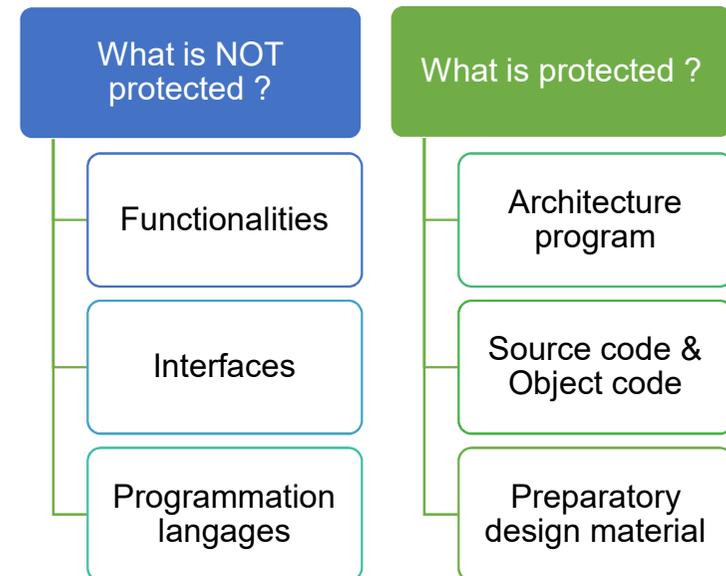
What does code become after a PhD thesis?

Researchers leave, with code on a server in the best case, and full point.

Why discuss about Copyright ?

Author right protects the “form” : the source code and the executable software

- As soon as the work is created
- No formalities
- At least 50 years (70 in BE) after death of the author
- A single condition: **originality**
- Protect the expression of an idea, not the idea itself
- For example
 - Literary works: romans, poems, **scientific papers**...
 - Visual works: pictures, drawings, photographs, logos...
 - Audio works: musics, jingles...
 - Audiovisual works: movies, animations, video games....
 - Other works: sculptures, architectural works, design, **software**...



Copyright regulations

Moral & Economic rights

Moral rights belong to the **author**

They are perpetual, inalienable and imprescriptible

The author can not sell/lose them through non-use

- **Disclosure:** decision for the first availability
- **Paternity:** respect for his name and quality
- **Integrity:** respect for his work

Economic rights also belong to the **author but...**

Exception for software: your University is the rights holder

The university may transfer the rights of use or exploit a software, usually non-exclusively, these rights include:

- **Reproduction:** including loading, displaying, running, transmission or storage,
- **Distribution:** authorize the placing on the market, for payment or free of charge,
- **Modification:** translation, adaptation, modification



Why a license? Which one?

- Distribution \equiv **make available the software out of your lab**
 - making it available to a (research) partner (!!!)
 - selling it,
 - installing it on a computer,
 - offering it as download from a website...
- License \equiv a contract that gives some rights \rightarrow loose a part of your freedom

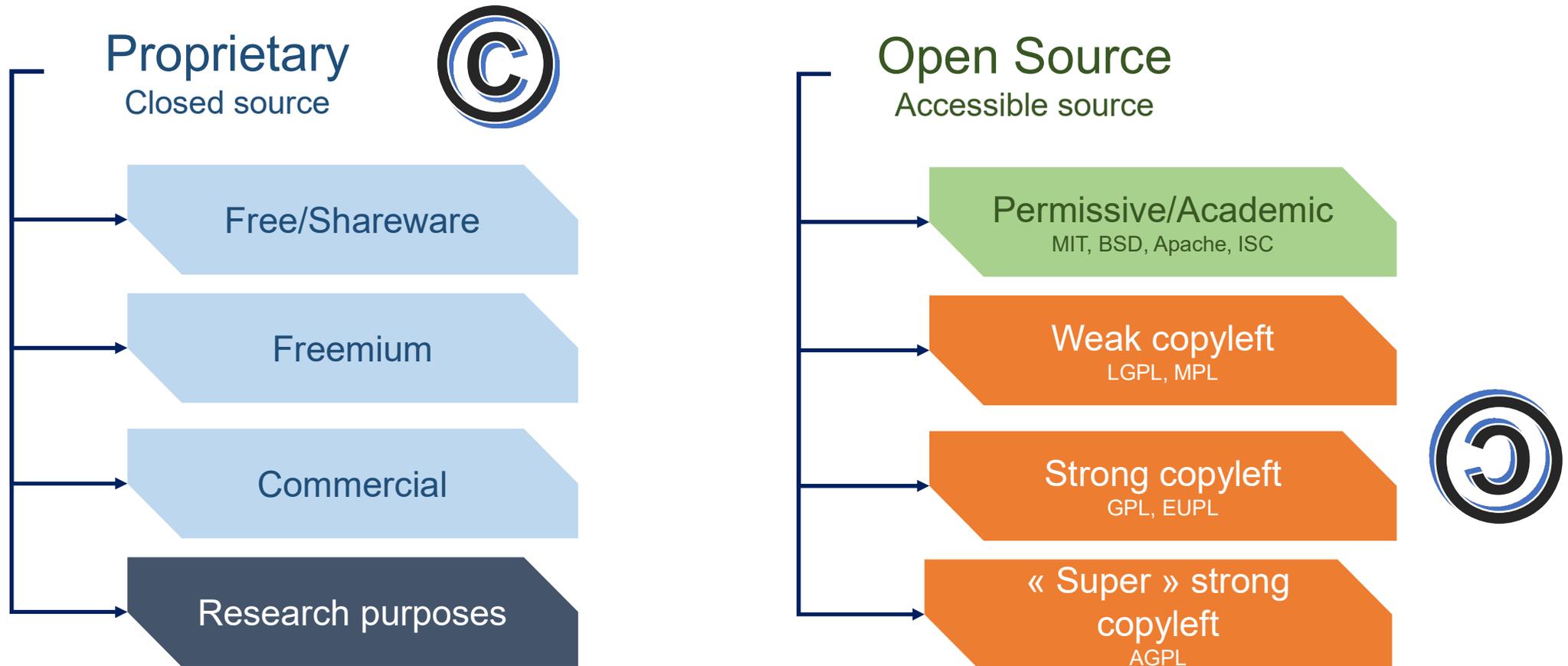


License: transfer of the “economic” rights

- 100% ownership = all rights for the rights holder = full freedom
- Take care: co-ownership = co-management !
- A University may **not transfer more rights than it has**:
 - Insertion of source code belonging to a third party ?
 - Source code developed in collaboration with other parties ?

The university (researchers and KTO) have to think together about the license under which a software will be distributed, either proprietary or open-source

Software license



Open-source licenses

Permissive vs. copyleft

Close to the public domain, as they generally impose only the respect of paternity

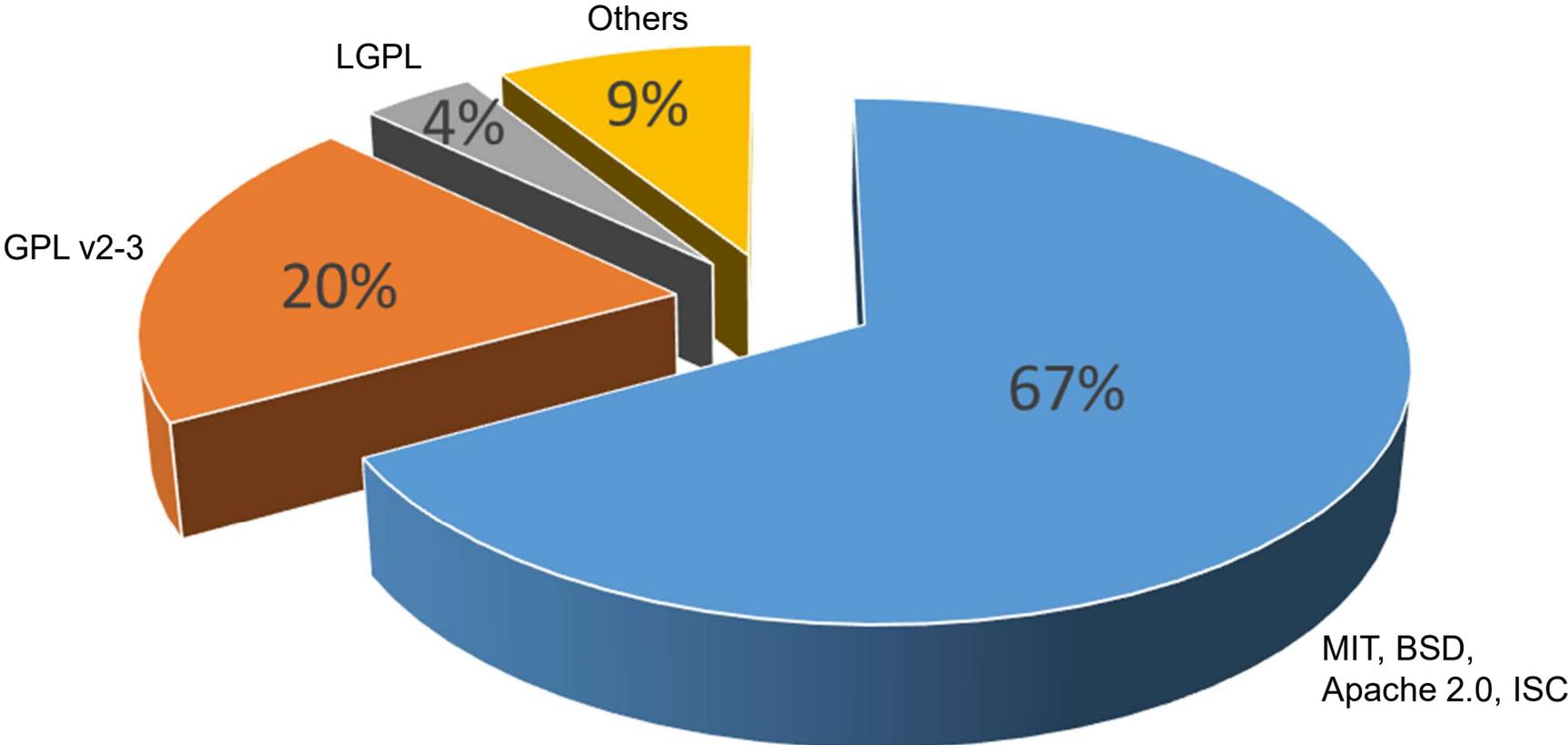
PERMISSIVE

<p>ACADEMIC LICENSES: BSD, MIT...</p> <p>Unconditional sharing of knowledge</p>	<p>GNU LICENSES: GPL, LGPL, AGPL...</p> <p>All derivative software is subject to the same license</p>
<p>COMMUNITY LICENSES: Artistic, Apache...</p> <p>Mainly from OS projects</p>	<p>INSTITUTIONAL LICENSES: MPL...</p> <p>Introduced by companies interested in the cooperative development</p>

COPYLEFT

Persistent granted freedoms, as the subsequent users automatically grant the same freedoms

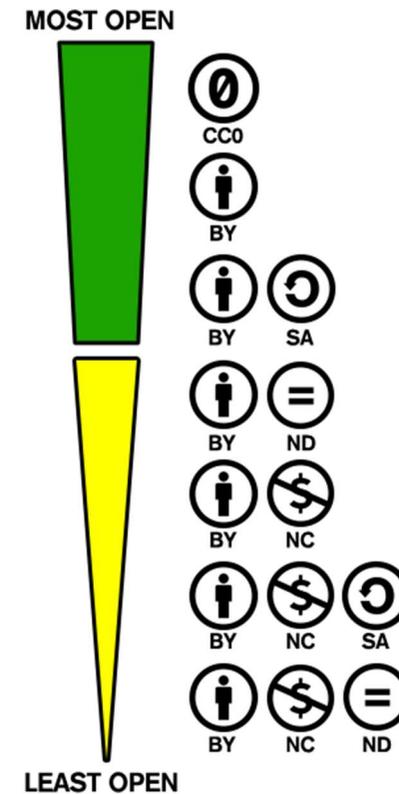
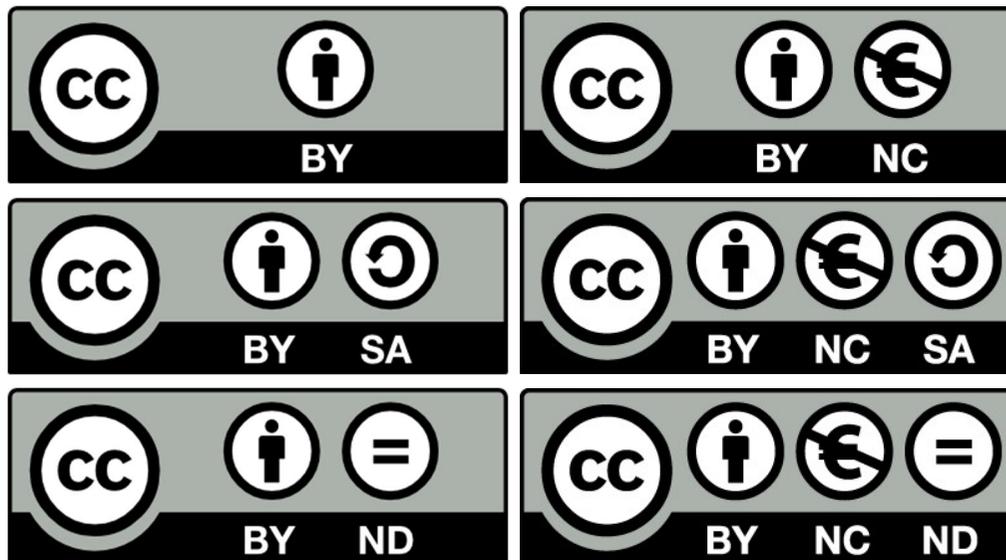
Most used open-source licenses



From BlackDuck 10-2018

(Creative Commons)

- Not adapted to software
- Adapted to documentation



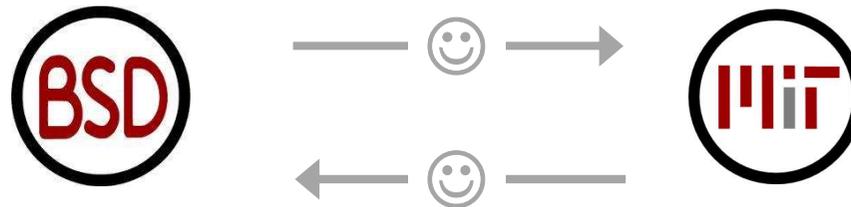
Issues of the compatibility clause

It may be impossible to choose a license (and thus to distribute or use a software) if the final software integrates incompatible libraries

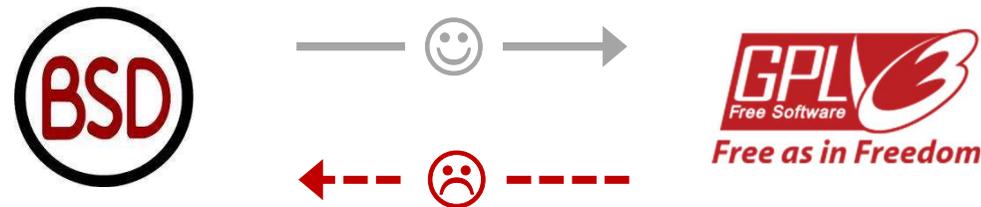
- Concerns the software **distribution**
- **Not all** open-source licenses are mutually **compatible**
- A license is compatible if it replaces another in accordance with all its terms

Issues of the compatibility clause

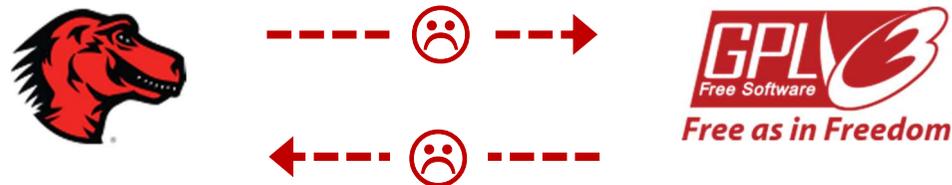
Reciprocity: BSD is MIT-compatible and MIT is BSD-compatible



False idea of reciprocity: BSD is GPL-compatible but GPL is not BSD-compatible



Complete incompatibility: Mozilla v.1 is not GPL-compatible and GPL is not Mozilla-compatible



(In)Compatibility – a recapitulative view

Compatibilité entre licences (a)

Lecture du tableau : peut-on, à partir d'une licence A (licence d'origine), distribuer sous une autre licence B (licence de distribution) ?

		Licences B : utilisées pour la distribution																			
		Propriétaire	Copyleft										Permissif								
		Propriétaire	Affero GPL	GPL V3	GPL V2	LGPL V3	LGPL V2.1	CeCILL	CeCILL-C	MPL	OSL	EUPL	CPL	EPL	BSD	BSD non modifiée	Apache	Latex	Academic Free License	CeCILL-B	
Licences A : d'origine	Propriétaire	O*																			
	Copyleft permissif	Affero GPL		O	O*																
		GPL V3		O*	O*																
		GPL V2		O\	O\	O															
		LGPL V3		O*	O*		O														
		LGPL V2.1		O\	O\	O	O\	O													
		CeCILL			O	O			O												
		CeCILL-C			O?	O?			O	O											
		MPL								O											
		OSL									O										
		EUPL				O			O			O	O	O	O						
	CPL												O								
	EPL													O							
	Permissif	BSD		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
BSD non modifiée			O*	O?	O?		O?		O?	O?					O*	O	O*	O*	O*	O	
Apache			O*	O*	O*		O*								O*	O*	O	O*	O*	O*	
Artistic License			O*	O*	O*		O*								O*	O*	O*	O	O*	O*	
Academic Free License			O*		O*						O				O*	O*	O*	O*	O	O*	
CeCILL-B			O*		O*				O	O					O*	O*	O*	O*	O*	O	

- O Oui, la distribution est possible sous la licence B
- O? Une incertitude existe
- Non
- O\ Oui, la distribution est possible sous la licence B, si le concédant a autorisé le relicenciement sous les versions ultérieures de la licence A
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EPL												O								
Permissif	BSD		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	BSD non modifiée		O*	O?	O?		O?		O?	O?					O*	O	O*	O*	O*	O
	Apache		O*	O*	O*		O*								O*	O*	O	O*	O*	O*
	Artistic License		O*	O*	O*		O*								O*	O*	O*	O	O*	O*
	Academic Free License		O*		O*							O			O*	O*	O*	O*	O	O*
	CeCILL-B		O*		O*				O	O					O*	O*	O*	O*	O*	O

Ex: BSD - PERMISSIVE

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	EPL												O								
	Permissif	BSD		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
BSD non modifiée			O*	O?	O?		O?		O?	O?											
Apache			O*	O*	O*		O*														
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Ex: GPL - COPYLEFT

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What impacts a licensing strategy ?

Your research context

- Code reuse
- Collaborative development



Your expectations

- Capture part of the value
- Give access to the source code

Parts of a software license

- **LICENSE.txt** or **COPYING.txt** : terms of the license itself i.e. a copy-and-paste from the website of the organization that issued the license
- **README.txt** : terms of application of the license, copyright notice, a brief description of the program (*)
- **AUTHORS.txt** : list of contributors to the software and their affiliation
- **SOURCES.txt** : mentions that must appear in the headers of the source files

() optional: information about the license of the documentation and the list of dependencies and their licenses*

Start your source files with an appropriate Copyright and License header

GPL

```
Copyright (C) 2016-2017 University of "..." // this is the owner(s) (mandatory)
```

```
<NEW SOFTWARE is a software for doing new things>
```

```
James Cook (laboratory of Soft Dev) - Contact: james.cook@research.be // facultative
```

```
This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public Licence as published by the Free Software Foundation, either version 3 of the Licence, or any later version.  
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public Licence for more details.
```

```
You should have received a copy of the GNU General Public Licence along with this program.
```

```
If not, see <http://www.gnu.org/licenses/>. // these are the licence specific terms (mandatory)
```

Take-home message

- **Think early** to the distribution license to avoid compatibility problems
- Always use a license for the code you distribute outside your University
- **Universities** are the **rights holders** → Important for the validity of the license (especially the warranty exemption clause)
- Editors now often ask a license
- Your KTO can advise you

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THANK YOU

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