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# Copyright and Scientific Publication: Tales of Two Copyrights

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# Outline

- I. A Tale of Two Copyrights
- II. Copyright Law Applied to Scientific Works
- III. Avenues Towards Open Access
- IV. Copyright and Science: Much Ado About Nothing?

# I. Introduction: A Tale of Two Copyrights



Jean Garnier. *Allégorie à Louis XIV Protecteur des Arts et des Sciences*  
(Palace of Versailles, 1670-1672)

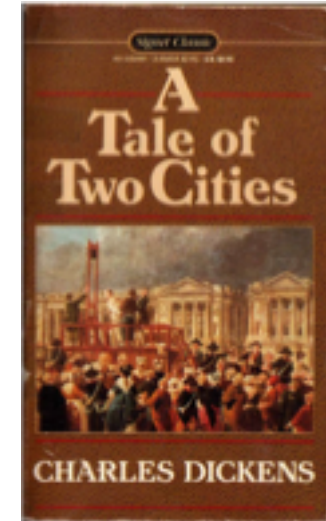
# I. Introduction: A Tale of Two Copyrights



Jean Garnier, *Allégorie à Louis XIV Protecteur des Arts et des Sciences*  
(Palace of Versailles, 1670-1672)

# I. Introduction: A Tale of Two Copyrights

*« (...) without denying the presence of a strong author's right current in the revolutionary laws, I would suggest that the revolutionary legislators generally resolved that public/private tension by **casting copyright primarily as an aid to the advancement of public instruction** (...) »*



(J. C. Ginsburg, « A Tale of Two Copyrights: Literary Property in Revolutionary France and America », *R.I.D.A.*, 1991/147, p. 177)

# I. Introduction: A Tale of Two Copyrights

*« (...) L'objet de la protection instituée par [les décrets révolutionnaires français] est constitué (...) par deux sortes d'œuvres de nature fort différente, opposée même : les œuvres sans caractère esthétique et les œuvres à caractère esthétique. (...) les premières expriment des aspects quantitatifs de la réalité, leur objet étant constitué par ce qui est objectivement déterminable, alors que les secondes expriment des aspects qualitatifs de la réalité, leur objet étant constitué par ce qui n'est appréhendable que de manière subjective (...) »*



(O. Lalignant, « La révolution française et le droit d'auteur ou pérennité de l'objet de la protection », *R.I.D.A.*, 1991/147, pp. 17-19)



## II. Copyright Law Applied to Scientific Works

- Legal Framework
  - Int'l
    - Berne Convention for the Protection of Literary and Artistic Works (1886) (Paris Act, 1951) [**Berne Convention**]
    - Agreement on Trade-Related Aspects of Intellectual Property Rights (1994) [**TRIPS**]
    - WIPO Copyright Treaty (1996) [**WCT**]
    - ...
  - EU
    - **Directive 2001/29/EC on the harmonization of certain aspects of copyright and related rights in the information society** [**InfoSoc Dir.**]
    - Directive 2009/24/EC on the legal protection of computer programs (codified version) [**Computer Programs Dir.**]
    - Directive 96/9/EC on the legal protection of databases [**Database Dir.**]
    - Directive 2006/115/EC on rental right and lending right and on certain rights related to copyright in the field of intellectual property (codified version) [**Rental/Lending Dir.**]
    - Directive 2006/116/EC on the term of protection of copyright and certain related rights (codified version) [**Term Dir.**]
    - Directive 2012/28/EU on certain permitted uses of orphan works [**Orphan Works Dir.**]
    - ...
  - Nat'l
    - Articles XI.165 and following **Code de droit économique/Wetboek van Economisch Recht** [**Economic Law Code**] [**CDE/WER**]
    - Numerous Arrêtés royaux/Koninklijke besluiten [**Royal Decrees**]

## II. Copyright Law Applied to Scientific Works

- Copyright Law
  - 1) Subject Matter and Requirements for Protection
  - 2) Economic and Moral Rights
  - 3) Exceptions and Limitations
  - 4) Duration
  - 5) Ownership



## II. Copyright Law Applied to Scientific Works

- 1.1) Subject Matter

- Work

- No definition at EU level
- See art. 2 Berne Convention : ‘The expression ‘literary and artistic works’ shall include **every production** in the literary, **scientific** and artistic domain, whatever may be the mode or form of its expression, such as (...)’
  - Expressed through words, shapes and colors, sounds, ...
  - No registration (*see art. 5(2)*)
  - Are irrelevant : form of expression, merits, purpose, quality, aesthetic, utility, novelty

## II. Copyright Law Applied to Scientific Works

- 1.2) Requirements for Protection
  - Expression
    - No definition at EU level
    - See art. 9(2) ADPIC : ‘Copyright protection shall extend to **expressions and not to ideas**, procedures, methods of operation or mathematical concepts as such’
    - No protection for expression when indissociable from idea (*merger doctrine*)
      - Comp. CJEU, *BSA*, C-393/09 (2010)
    - Elusive ‘Dichotomy Idea/Expression’
  - Originality
    - Harmonised through case law at EU level : ‘**Author’s own intellectual creation**’
      - See CJEU, *Infopaq*, C-5/08 (2009)
    - Criterias
      - ‘Personal touch’ ; ‘Free and creative choices’
      - See CJEU, *Painer*, C-145/10 (2011) ; *Football Dataco*, C-604/10 (2012)
    - Low threshold

## II. Copyright Law Applied to Scientific Works

- 2.1) Economic Rights
  - Harmonised at EU Level
  - Bundle of rights
    - **Reproduction right**
      - Adaptation/Translation ? Debates on EU Harmonisation but encompassed by reproduction right in Belgium (see art. XI.165, § 1<sup>o</sup> al. 2 CDE/WER)
    - **Right of communication and making available to the public**
    - **Distribution right**
    - **Rental right**
    - **Lending right**
  - Common features
    - Exclusive rights (to ‘authorize’ or to ‘prohibit’)
    - Designed to cover (together) all kinds of exploitation of a work
    - Broad interpretation

## II. Copyright Law Applied to Scientific Works

- 2.1) Economic Rights
  - Reproduction
    - See art. 2(a) InfoSoc Dir. : ‘(...) exclusive right to authorise or prohibit **direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part:** for authors, of their works (...)’
  - Communication and making available to the public
    - See art. 3(1) InfoSoc Dir. : ‘(...) exclusive right to authorise or prohibit any **communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access them from a place and at a time individually chosen by them’**
  - Distribution
    - See art. 4 InfoSoc Dir. : ‘(...) exclusive right to authorise or prohibit **any form of distribution to the public by sale or otherwise’**
  - Rental/Lending
    - See art. 1(1)(a) Rental/Lending Dir.: ‘Rental means **making available for use, for a limited period of time and for direct or indirect economic or commercial advantage’**
  - Lending
    - See art. 1(1)(b) Rental/Lending Dir.: ‘Lending means **making available for use, for a limited period of time and not for direct or indirect economic or commercial advantage, when it is made through establishments which are accessible to the public’**

## II. Copyright Law Applied to Scientific Works

- 2.2) Moral Rights
  - Not harmonised at EU level
  - Int'l minimal protection
    - *See art. 6bis Berne Convention* : 'Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the **right to claim authorship** of the work and **to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation**'
  - Nat'l protection (Belgium)
    - *See art. XI.165, § 2 CDE/WER*
      - **Right of divulgation**
      - **Right of attribution**
      - **Right of integrity of the work**
        - » Any modification (material/immaterial), prejudice must not be proven (Cass. 8 May 2008)
    - No right to withdraw the work

## II. Copyright Law Applied to Scientific Works

- 3) Exceptions and Limitations
  - Harmonised at EU level
    - Closed list, exhaustive and optional
  - 3 Step Test
    - See art. 9(2) Berne Convention, 13 ADPIC, 5(5) InfoSoc Dir.
    - ‘The exceptions and limitations (...) shall only be applied in **certain special cases which do not conflict with a normal exploitation of the work** or other subject-matter and **do not unreasonably prejudice the legitimate interests of the rightholder**’
  - Strict ( $\neq$  restrictive) interpretation
    - See in particular CJEU, *Infopaq*, C-5/08 (2009) (strict) ; *Deckmyn*, C-201/13 (2014) (not restrictive)

## II. Copyright Law Applied to Scientific Works

- 3) Exceptions and limitations
  - To reproduction right
    - **Private uses**
      - See art. 5(2)(a) InfoSoc Dir. (reprography) ; art. 2(b) Infosoc Dir. (private copying)
      - Remuneration right for authors ('fair compensation')
  - To reproduction and communication right
    - **Quotation**
      - See art. 5(3)(d) InfoSoc Dir.
    - **Use for (illustration of?) scientific research**
      - See art. 5(3)(a) InfoSoc Dir.
    - **Use for research/private study on dedicated terminals in cultural establishments**
      - See art. 5(3)(n) InfoSoc Dir.
        - » See CJEU, *Technisch Universität Darmstadt*, C-117/13 (2014)
    - **Orphan works**
      - See art. 6 Orphan Works Dir.
  - To distribution right
    - **Exhaustion** after first sale in EEA
      - See art. 4(2) InfoSoc Dir.
  - To lending right
    - **Public lending**
      - See art. 6 Rental/Lending Dir.
      - Including lending of a digital copy
        - » See CJEU, *Vereniging Openbare Bibliotheken*, C-174/15 (2016)



## II. Copyright Law Applied to Scientific Works

- 4) Duration
  - Economic Rights (harmonised at EU level)
    - General rule : **life of the author + 70 years**
      - See art. 1(1) Term Dir.
    - Specific rules for some works
      - Joint authorship : life of the last surviving authors + 70 years
        - » See art. 1(2) Term Dir.
      - Previously unpublished works : 25 years after first publication/communication
        - » See art. 4 Term Dir.
  - Moral Rights (not harmonised at EU level)
    - Berne Convention : life of the author + 50 years
      - See art. 7(1)
    - Belgium: life of the author + 70 years
    - Perpetual in some countries (*e.g.* France)

## II. Copyright Law Applied to Scientific Works

- 5) Ownership
  - Economic rights (little harmonisation at EU level)
    - General rule (EU) : no harmonisation in InfoSoc Dir.
      - But see CJEU, *Reprobel*, C-257/13 (2015) : ‘publishers are not among the reproduction rightholders listed in article 2 InfoSoc Dir.’ (§ 47)
    - General rules (Belgium)
      - ‘The original owner of the copyright is the **natural person who created the work**’
        - » See art. XI.170 CDE/WER
      - **Assignable rights**
        - » See art. XI.167, § 1, al. 1 CDE/WER
    - Specific rules (Belgium) for some works
      - Joint authorship : terms of the contract
        - » See art. XI.168 CDE/WER
      - Works created in execution of a contract of employment or status : poss. assignment of rights to the employer
        - » See art. XI.167, § 3 CDE/WER
  - Moral rights (not harmonised at EU level)
    - Belgium: **inalienable right, but poss. waive exercise**
      - See art. XI.165, § 2 CDE/WER

## III. Avenues Towards Open Access

- Copyright as an impediment to Open Access
  - Budapest Open Access Initiative (2002)
    - ‘(...) free availability (...) **without** financial, **legal**, or technical **barriers** (...). 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 (...)’
  - Bethesda Statement on Open Access Publishing (2003)
    - ‘(...) The **author(s) and copyright holder(s)** grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to (...)’
  - Berlin Declaration on Open Access to Knowledge in the Science and Humanities (2003)
    - ‘(...) The **author(s) and right holder(s) of such contributions** grant(s) to all users a free, irrevocable, worldwide, right of access to, and a license to (...)’

## III. Avenues Towards Open Access

- EU Policy : Copyright as an impediment to Open Access balanced with Intellectual Property as a driving force in the Economy
  - InfoSoc Directive
    - ‘A harmonised legal framework on copyright and related rights, through increased legal certainty and while providing for a **high level of protection of intellectual property, will foster substantial investment in creativity and innovation (...)**’
      - See recital 4
  - Commission Recommendation on Access to and Preservation of Scientific Information (2012/417/EU) (2012)
    - ‘(...) licensing systems contribute to open access to scientific publications resulting from publicly-funded research in a balanced way, **in accordance with and without prejudice to the applicable copyright legislation**, and encourage researchers to retain their copyright while granting licences to publishers (...)’
      - See recommandation 1
  - Horizon 2020 – EU Framework Program for Research and Innovation
    - ‘(...) the grant agreement may, in the context of the open access to and the preservation of research data, lay down terms and conditions under which open access to such results shall be provided (...) **taking into consideration** the legitimate interests of the participants and any constraints pertaining to data protection rules, security rules or **intellectual property rights**’
      - See art. 43(2) Regulation 1290/2013

## III. Avenues Towards Open Access

- No avenues in
  - Subject matter and requirements for protection
  - Duration
- Avenues?
  - 1) New Rights?
  - 2) New Exceptions?
  - 3) Contracts?

## III. Avenues Towards Open Access

- 1) New Rights?
  - Ex. Germany: § 38(4) Urheberrechtsgesetz (2014)
    - ‘**Der Urheber eines wissenschaftlichen Beitrags**, der im Rahmen einer mindestens **zur Hälfte mit öffentlichen Mitteln geförderten Forschungstätigkeit entstanden** und in einer periodisch mindestens zweimal jährlich erscheinenden Sammlung erschienen ist, hat auch dann, wenn er dem Verleger oder Herausgeber ein ausschließliches Nutzungsrecht eingeräumt hat, das **Recht, den Beitrag nach Ablauf von zwölf Monaten** seit der Erstveröffentlichung in der akzeptierten Manuskriptversion **öffentlich zugänglich zu machen**, soweit dies keinem gewerblichen Zweck dient. Die Quelle der Erstveröffentlichung ist anzugeben. Eine zum Nachteil des Urhebers abweichende Vereinbarung ist unwirksam’

### III. Avenues Towards Open Access

- 1) New Rights?
  - Ex. Netherlands: art. 25fa Auteurswet (2015)
    - ‘De maker van een **kort werk van wetenschap** waarvoor het onderzoek geheel of gedeeltelijk **met Nederlandse publieke middelen is bekostigd**, heeft het **recht om dat werk na verloop van een redelijke termijn** na de eerste openbaarmaking ervan, om niet **beschikbaar te stellen voor het publiek**, mits de bron van de eerste openbaarmaking daarbij op duidelijke wijze wordt vermeld’



## III. Avenues Towards Open Access

- 1) New Rights?
  - Ex. France: art. L. 533-4 Code de la recherche (2016)
    - ‘I. Lorsqu'un écrit scientifique issu d'une **activité de recherche financée au moins pour moitié par des dotations de l'Etat**, des collectivités territoriales ou des établissements publics, par des subventions d'agences de financement nationales ou par des fonds de l'Union européenne est publié dans un périodique paraissant au moins une fois par an, **son auteur dispose**, même après avoir accordé des droits exclusifs à un éditeur, **du droit de mettre à disposition gratuitement dans un format ouvert, par voie numérique, sous réserve de l'accord des éventuels coauteurs, la version finale de son manuscrit acceptée pour publication**, dès lors que l'éditeur met lui-même celle-ci gratuitement à disposition par voie numérique ou, à défaut, à l'expiration d'un délai courant à compter de la date de la première publication. Ce délai est au maximum de **six mois** pour une publication **dans le domaine des sciences, de la technique et de la médecine et de douze** mois dans celui des sciences humaines et sociales (...)’
    - ‘IV. Les dispositions du présent article sont d'**ordre public** et toute clause contraire à celles-ci est réputée non écrite’

## III. Avenues Towards Open Access

- 1) New Rights?
  - Common features
    - Scientific periodicals (books excluded)
    - Public research fundings (at least 50%)
    - Right of making available to the public after limited period (from 6 to 12 months)
  - Main obstacle : territoriality of nat'l copyright laws
    - No (or limited) effect through contract (foreign *lex contractus*)
      - 'Public policy provision' as a solution is highly dubious when outside of the country
    - Authorized uses in countries with this new right might be an infringement in others
      - Geoblocking measures on Internet as a potential consequence

## III. Avenues Towards Open Access

- 2) New exceptions?
  - Ex. art. 3 EU Commission proposal for a Directive on copyright in the Digital Single Market (COM(2016) 593 final)
    - ‘1. Member States shall provide for an **exception** to the rights provided for in Article 2 of Directive 2001/29/EC, Articles 5(a) and 7(1) of Directive 96/9/EC and Article 11(1) of this Directive for **reproductions and extractions made by research organisations in order to carry out text and data mining** of works or other subject-matter to which they have lawful access **for the purposes of scientific research**’
    - ‘2. Any contractual provision contrary to the exception provided for in paragraph 1 shall be unenforceable’

## III. Avenues Towards Open Access


- 2) New exceptions?
  - TDM exception limited in scope, far from Open Access objective
    - Comp. Berlin Declaration (copying, using, distributing, transmitting, displaying, making and distributing derivative works)
  - More extensive exceptions // Open Access objective ?
    - Main obstacle : 3 step test (int'l and EU law)
      - Whole category of scientific publications -> Special case?
      - Competition with traditional publishing model -> Conflict with normal exploitation? Unreasonably prejudice to legitimate interests of the right holder (not necessarily the author)?

### III. Avenues Towards Open Access

- 3) Contracts?
  - Ex. Licences Creative Commons



**CREATIVE COMMONS LICENSES**

		COPY & PUBLISH	ATTRIBUTION REQUIRED	COMMERCIAL USE	MODIFY & ADAPT	CHANGE LICENSE
	PUBLIC DOMAIN	✓	✗	✓	✓	✓
	CC BY	✓	✓	✓	✓	✓
	CC BY-SA	✓	✓	✓	✓	✗
	CC BY-ND	✓	✓	✓	✗	✓
	CC BY-NC	✓	✓	✗	✓	✓
	CC BY-NC-SA	✓	✓	✗	✓	✗
	CC BY-NC-ND	✓	✓	✗	✗	✓

 You can redistribute (copy, publish, display, communicate, etc.)  
 You have to attribute the original work  
 You can use the work commercially  
 You can modify and adapt the original work  
 You can choose license type for your adaptations of the work.

## III. Avenues Towards Open Access

- 3) Contracts?
  - Ex. Licences Creative Commons



## III. Avenues Towards Open Access

- 3) Contracts?
  - Ex. Peer Production License
    - See art. 4(c) :
      - ‘(...) You may exercise the rights granted in Section 3 [reproducing, adapting, distributing, publicly perform] for **commercial purposes only** if:
        - i. You are a **worker-owned business or worker-owned collective**; and
        - ii. All **financial gain**, surplus, profits and benefits produced by the business or collective are **distributed among the worker-owners (...)**’



## III. Avenues Towards Open Access

- 3) Contracts?
  - Main obstacle: ‘validation’ step (through peer review) under aegis of publisher = high bargaining power

## IV. Copyright and Science: Much Ado About Nothing?

### Scientific publication

- Ideas, facts, procedures, methods of operation, mathematical concepts as such
- Inventions
- Literary and/or artistic expression

⇒ No protection under Copyright law

⇒ Protection under Patent law, subject to description, publication and registration

⇒ Protection under Copyright law, but exceptions for scientific uses

⇒ Traditional Publishing model: assignment of copyright to publisher amounts to possible denial of access (*paywall*)

## IV. Copyright and Science: Much Ado About Nothing?

- **What is necessary for scientific purposes is not protected by IP laws or protected provided it is made publicly accessible**
  - Rationale : scientific progress
    - See CJEU, *SAS Institute*, C-406/10 (2012) : ‘(...) to accept that the functionality of a computer program can be protected by copyright would amount to making it possible to **monopolise ideas, to the detriment of technological progress and industrial development**’
    - See recital 9 Proposal for a Directive on copyright in the Digital Single Market : ‘(...) As research is increasingly carried out with the assistance of digital technology, there is a risk that the **Union's competitive position as a research area will suffer unless steps are taken to address the legal uncertainty for text and data mining (...)**’

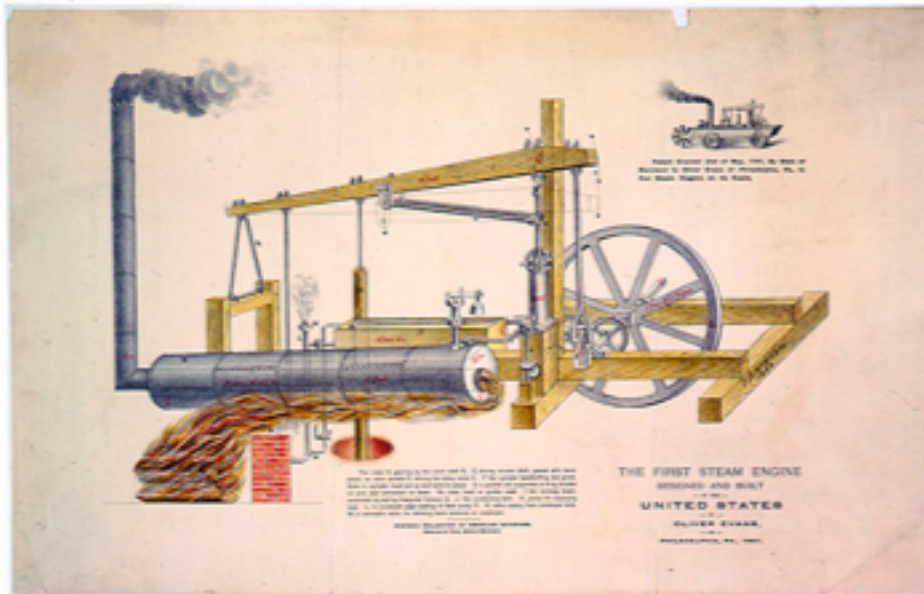
⇒ **Does the traditional publishing model contribute appropriately to scientific progress?**

- **The author has a control on the scientific publication process**
  - The author is the **original holder** of the copyright, not the publisher
    - Assignment of rights through contracts
  - For authors, **traditional justifications for copyright protection are not sound** what concerns scientific publication
    - No economic incentive (only for publishers)
    - Protection or personality and fame guaranteed through moral rights (not economic rights)
  - **‘Validation’ step relies on peer review** and therefore on authors

⇒ **Is the traditional publishing model relying on copyright law still valid ?**

## IV. Copyright and Science: Much Ado About Nothing?

- Conclusion : A Tale of Two Copyrights in Science?



Publishers for the progress of science !



Publishers for the progress of science ?

Thank you for your attention !

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