





AISA

Associazione italiana per la promozione della scienza aperta

Copyright for public and democratic science

"OPEN SCIENCE AND
RESPONSIBLE RESEARCH EPISTEMOLOGICAL,
ETHICAL, SOCIAL, POLITICAL ISSUES", <u>Università</u>
Bicocca, Milano- June 23, 2023

Roberto Caso



Some fundamental questions

• What is the (Open) Science for? What is the University for?

What IP for?

European ambiguities: lessons from pandemic (e.g., vaccines & IP)



Outline

1. Academic freedom, democracy, IP and human right to (open) science

 European contradictions on the public/private boundaries: IP, innovation, progress of knowledge, democracy

3. Making public and democratic science: e.g. SPR



1. Right to (open) science (2020)

• 11. The right enshrined in article 15 (1) (b) encompasses not only a right to receive the benefits of the applications of scientific progress, but also a right to participate in scientific progress. Thus, it is the right to participate in and to enjoy the benefits of scientific progress and its applications.

United Nations





Economic and Social Council

Distr.: General 30 April 2020

Original: English

Committee on Economic, Social and Cultural Rights

General comment No. 25 (2020) on science and economic, social and cultural rights (article 15 (1) (b), (2), (3) and (4) of the International Covenant on Economic, Social and Cultural Rights)*



1. Right to (open) science (2020)

• 60. [...] intellectual property can negatively affect the advancement of science and access to its benefits [...]. It is necessary to tackle these three problems in order to ensure that intellectual property promotes the research and innovation crucial to the full enjoyment of economic, social and cultural rights without undermining these rights.

United Nations

E/c.12/GC/25



Economic and Social Council

Distr.: General 30 April 2020

Original: English

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General comment No. 25 (2020) on science and economic, social and cultural rights (article 15 (1) (b), (2), (3) and (4) of the International Covenant on Economic, Social and Cultural Rights)*



1. Kantian roots of the human right to (open)

science (1784-1785-1797)

Kant

Copyright is not property

 Work (of authorship) as public dialogue between author and public

Public use of reason



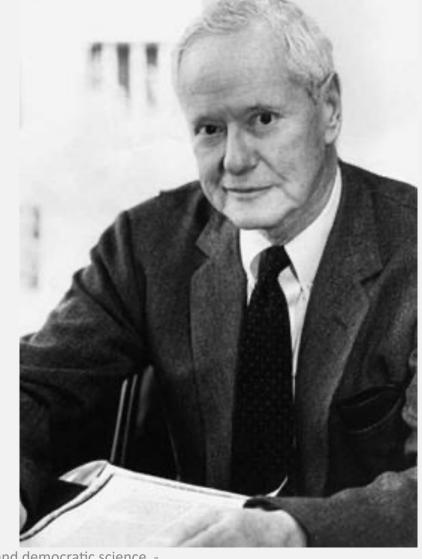


1. Mertonian roots of the human right to (open) science

(1938-1942)

Merton

- Communism
- Universalism
- Disinterestedness
- Skepticism





1. Merton (1988)

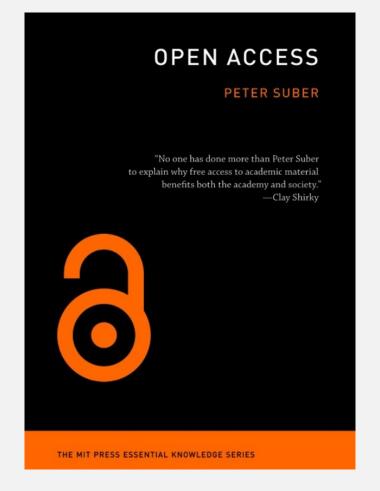
 The Matthew Effect in Science, II: Cumulative Advantage and the Symbolism of Intellectual Property «[...] even in a capitalistic society, of publishing one's work without being directly recompensed for each publication have made for the growth of public knowledge and the eclipse of private tendencies toward hoarding private knowledge (secrecy), still much in evidence as late as the seventeenth century. Current renewed tendencies toward secrecy, and not alone in what Henry Etzkowitz has described as "entrepreneurial science," will, if extended and prolonged, introduce major change in the institutional and cognitive workings of science».



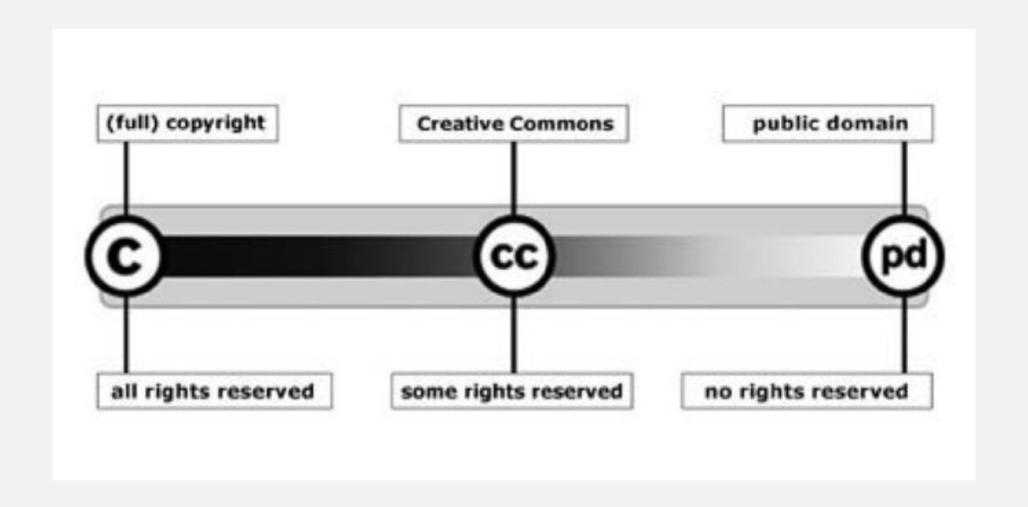
1. Open Access: Peter Suber (2012)

"Open access (OA) literature is

- digital,
- online,
- free of charge, and
- free of most copyright and licensing restrictions"



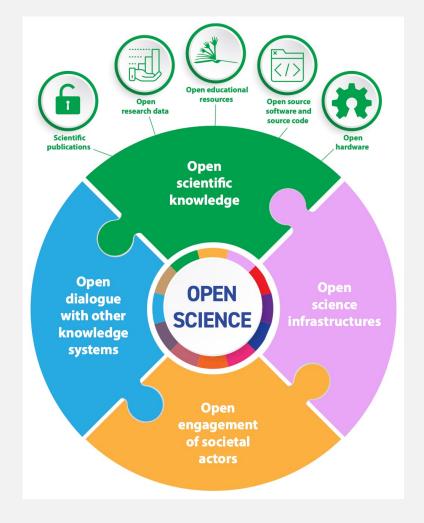






1. Open Science: UNESCO (2021)

• «[...] an inclusive construct that combines various movements and practices aiming to make multilingual scientific knowledge openly available, accessible and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community».





1. Ambiguities: RTS vs.[and] OS [Yu 2022]



 «Despite the high hopes of public health advocates and scholars that the right to science will provide a new human rights tool to resolve the tensions and conflicts between intellectual property and human rights, General Comment No. 25 does not definitively provide such resolution».





https://it.wikipedia.org/wiki/Apocalypse_Now



Z. Pseudo-IP → control of data, machines and infrastructures

- Paracopyright
- Sui generis right
- Trade secret as IP
- Data exclusivity
- Contract + de facto control of data
- Etc.



2. EU. Danger of death! Don't touch IP & pseudo-IP

• + IP = + innovation

 E.g. Making the most of the EU's innovative potential An intellectual property action plan to support the EU's recovery and resilience COM/2020/760 final





2. Surveillance Publishing and data analytics of the Intellectual Monopolies (2019-)

Surveillance Publishing



Stop Tracking Science

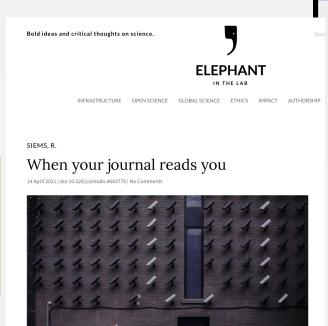
Jefferson D. Pooley

Muhlenberg College pooley@muhlenberg.edu jeffpooley.com

A working paper, under review

The major academic publishers have made collection and trading of data about the research interests of individuals, groups and research institutions their new business model across the research workflow. The publishers take notes and sell the knowledge about you to third parties. This business model is in direct opposition to academic freedom. We have to stand up against these corporations!

Stop Tracking Science!



« Mysterious Triality | Main | The Binary Octahedral Group »

December 4, 2021

Surveillance Publishing Posted by John Baez

"massive over-payment of academic publishers has enabled them to buy surveillance technology covering the entire workflow that can be used not only to be combined with our private data and sold, but also to make algorithmic (aka 'evidenceled') employment

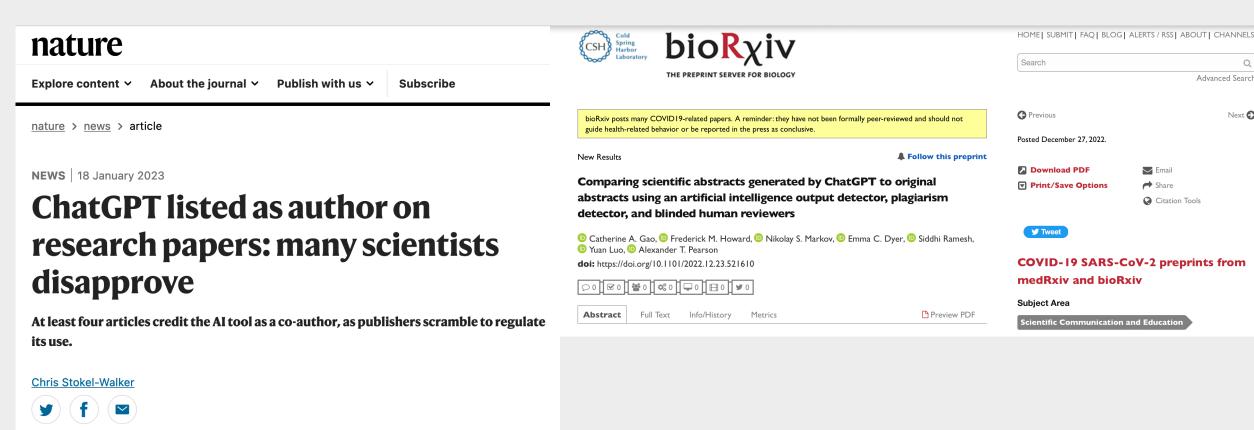
Reading about this led me to this article

Jefferson D. Pooley, Surveillance publishing

It's all about what publishers are doing to make money by collecting data on the habits of their readers. Let me quote a bunch!



2. The Death of the (scientific) Author (and reviewer) (2023)





Advanced Search

Next 🕤

2. Karen Maex (January 8th 2021)



- [...] And so private companies continue to enlarge their role while the public character of our independent knowledge system is further eroded.
- [...] What applies to the future of democracy applies equally to the future of universities and of independent education and research as vital building blocks for the organisation of knowledge. We cannot simply leave the future of knowledge to the corporate boardrooms.



3. Intellectual monopoly capitalism (Pagano 2014)

Cambridge Journal of Economics 2014, **38**, 1409–1429 doi:10.1093/cje/beu025 Advance Access publication 4 August 2014

The crisis of intellectual monopoly capitalism

Ugo Pagano*

The last three decades have witnessed the emergence of a new species of capitalism. In spite of marked differences between its national varieties, a common characteristic of this species can be found in the global monopolisation of knowledge. This monopolisation involves hierarchical relations among firms and between capital and labour, because the capital of some firms includes the exclusive ownership of much of the knowledge used in production. Since the 1994 Trade-Related Aspects of Intellectual Property Rights agreements, the growing commoditisation of knowledge has extended the role of closed science and closed markets at the expense of open science and open markets. The intrinsic long-term dynamics of this species of capitalism is increasingly characterised by financialisation, inequality and stagnation. In order to exit from the current crisis, we must change many features of intellectual monopoly capitalism and rely on an eclectic approach that draws insights from liberal, Keynesian and Marxian traditions.

Key words: Intellectual monopoly, Great Recession, Financialisation, Eclecticism 7EL classifications: B52, E11, E12, F55, G01

Inequality

Stagnations



3. The Fall of the Innovation Empire (Gold)



Open PDF in Browser



The Fall of the Innovation Empire and its Possible Rise Through Open Science

Research Policy 50:5 104226

13 Pages • Posted: 29 Mar 2021 • Last revised: 31 Mar 2021

E. Richard Gold

McGill University - Faculty of Law

Date Written: March 17, 2021

Abstract

There is growing concern that the innovation system's ability to create wealth and attain social benefit is declining in effectiveness. This article explores the reasons for this decline and suggests a structure, the open science partnership, as one mechanism through which to slow down or reverse this decline. The article examines the empirical literature of the last century to document the decline. This literature suggests that the cost of research and innovation is increasing exponentially, that researcher productivity is declining, and, third, that these two phenomena have led to an overall flat or declining level of innovation productivity. The article then turns to three explanations for the decline – the growing complexity of science, a mismatch of incentives, and a balkanization of knowledge. Finally, the article explores the role that open science partnerships – public-private partnerships based on open access publications, open data and materials, and the avoidance of restrictive forms of intellectual property – can play in increasing the efficiency of the innovation system.

Keywords: Innovation, Research productivity, Open science, Intellectual property, Patents, Research incentives, Public-private partnerships, Networks

Suggested Citation:

 «The article examines the empirical literature of the last century to document the decline. This literature suggests that the cost of research and innovation is increasing exponentially, that researcher productivity is declining, and, third, that these two phenomena have led to an overall flat or declining level of innovation productivity. The article then turns to three explanations for the decline – the growing complexity of science, a mismatch of incentives, and a balkanization of knowledge».



3. Upstream policies: public/private

Designing roles of public and privact sectors

Designining roles of university and public research institutions

Designing IP and pseudo-IP

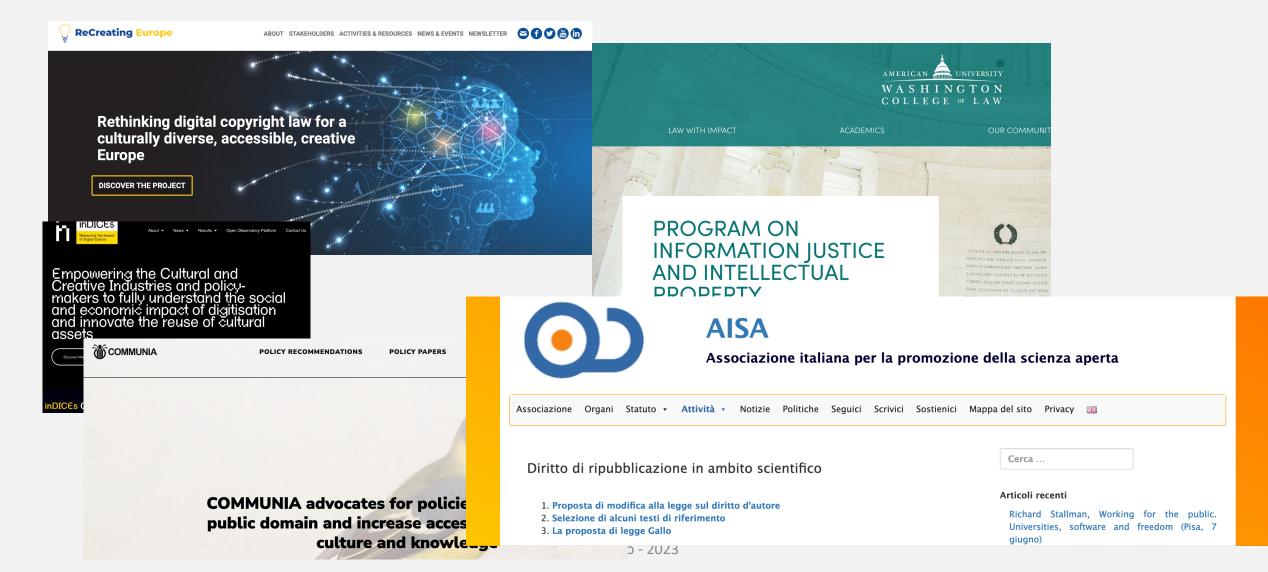


3. Making public and democratic science

- Buliding public data management infrastrctures based on open standards (for text, data and code)
- Reforming research assessment
- Investing in **education** () ethics) of the new generation of scientists and citizens
- Top down/Bottom up: Reforming Intellectual Property →
 e.g. reforming Exceptions & Limitations to copyright,
 introducing a SPR Using IP in a different way → Istituto
 Mario Negri, Montréal Neurological Institute



3. Towards a copyright for science?

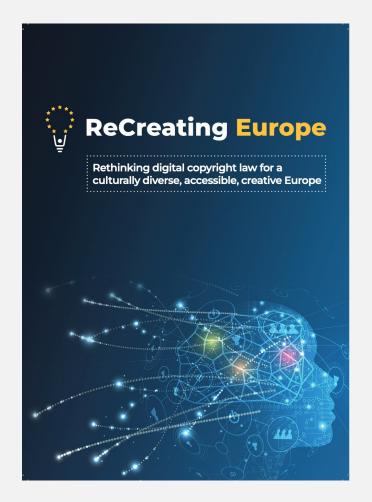


3. Towards a copyright for science?

E.g.

 Reforming Exceptions & Limitations

 Secondary Publication Right (SPR)



3. Second Publication Right: a tentative defintion

• The right to (re-)publish in Open Access a scientific text (e.g.: a scientific article) previously or at the same time published in a closed access venue (e.g.: a closed access scientific journal with strong copyright restrictions)



3. For example...

332 European Intellectual Property Review

Academic Copyright, Open Access and the "Moral" Second Publication Right

Roberto Caso Giulia Dore

de Academic purposes; Authors' rights; Copyright; EU law; Moral rights; Publication; Publishers

Abstract

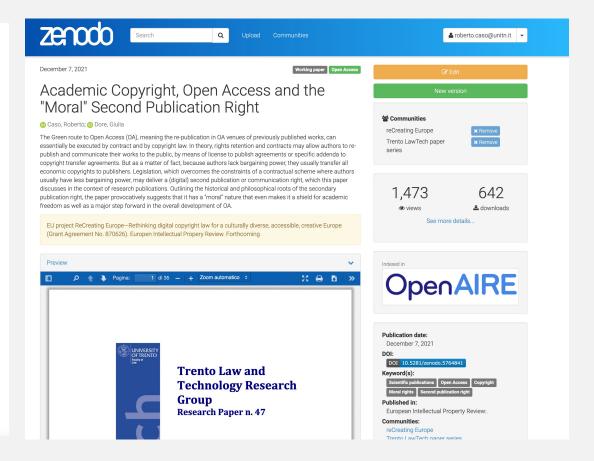
The Green route to Open Access (OA), meaning the re-publication in OA venues of previously published works, can essentially be executed by contract and by copyright law. In theory, rights retention and contracts may allow authors to re-publish and communicate their works to the public, by means of licence to publish agreements or specific addenda to copyright transfer agreements. But as a matter of fact, because authors lack bargaining power, they usually transfer all economic copyrights to publishers. Legislation, which overcomes

provocatively suggests that it has a "moral" nature that even makes it a shield for academic freedom as well as a major step forward in the overall development of OA.

Introduction

The implementation of Open Access (OA) to scientific publications follows two roads: Gold or Green. The Gold Road to OA consists in publishing *ab initio* with open licences (such as Creative Commons licences) on OA publishing venues (e.g. OA journals). The Green Road consists in re-publishing (and communicating to the public via the internet) in OA venues (e.g. self-archiving OA repositories) works previously published in non-OA or closed venues. The Green OA route is made possible through two legal strategies: the first is contractual, whereas the second is legislative.

The contractual retention of the rights of re-publication and communication to the public allows authors to negotiate with the publisher to retain the right to re-publish and communicate to the public an OA version of the work, through transfer agreements (e.g. licence to publish), or additional contractual amendments to standard publishing contracts (addenda). With reference to research texts, this could be the first draft (pre-print), the modified version following peer review (post-print or Author Accepted Manuscript) or, in some limited cases, the final edited version published by the publisher (publisher's version or Version of Record). This



3. The rationale of SPR

 Usually the author does not receive a monetary compensation (e.g. royalties) from the publisher

Usually the basic research is funded by public sector (tax payers)

 The scientific author speaks on behalf of a universal science not on behalf of an institution (e.g. University of Trento)



3. Italy. AISA's proposal

- AISA
- Art. 42-bis (L. 22 aprile 1941, n. 633, Protezione del diritto d'autore e di altri diritti connessi al suo esercizio)
- 1. L'autore di un'opera scientifica che sia il risultato di una ricerca interamente o parzialmente finanziata con fondi pubblici, come un articolo, una monografia o un capitolo di un libro, ha il diritto di riprodurre, distribuire e mettere a disposizione gratuita del pubblico la propria opera nel momento in cui l'editore l'abbia messa a disposizione gratuita del pubblico o dopo un ragionevole periodo di tempo, comunque non superiore a un anno, dalla prima pubblicazione. L'autore rimane titolare di tale diritto anche qualora abbia ceduto in via esclusiva i diritti di utilizzazione economica sulla propria opera all'editore o al curatore. L'autore nell'esercizio del diritto indica gli estremi della prima edizione, specificando il nome dell'editore.
- 2. Le disposizioni del primo comma sono di ordine pubblico e ogni clausola contrattuale che limiti il diritto dell'autore è nulla.



3. Italy. Gallo's bill

- XVIII Legislatura -Proposta Gallo DDL 1146 Art. 42-bis LdA
- Dopo l'articolo 42 della legge 22 aprile 1941, n. 633, è inserito il seguente:

«Art. 42-bis. — 1. L'autore di un'opera scientifica pubblicata in un periodico, che sia il risultato di una ricerca finanziata per una quota pari o superiore al 50 per cento con fondi pubblici, ha il diritto, purché senza fini commerciali, di renderla disponibile gratuitamente al pubblico nella rete internet, in archivi elettronici istituzionali o disciplinari, con accesso aperto, dopo che essa è stata messa a disposizione gratuita del pubblico dall'editore o comunque dopo non più di sei mesi dalla prima pubblicazione, quando si tratta di opere nelle aree disciplinari scientifiche, tecniche e mediche, e dopo non più di un anno, quando si tratta di opere nelle aree disciplinari umanistiche e delle scienze sociali. Nell'esercizio del predetto diritto l'autore indica gli estremi della prima edizione, specificando il nome dell'editore.

2. L'autore rimane titolare del diritto di cui al comma 1 anche nel caso in cui abbia ceduto in via esclusiva i diritti di utilizzazione accommica della propria appara all'editore o all'appara propria papara all'editore o all'editore o comunque dopo non più di sei mesi della propria papara all'editore o comunque dopo non più di sei mesi di propria papara all'editore o comunque dopo non più di sei mesi di pubblica propria papara all'editore o comunque dopo non più di sei mesi di pubblica propria papara all'editore o comunque dopo non più di sei mesi di pubblica propria papara all'editore o comunque dopo non più di sei mesi di pubblica propria papara all'editore o comunque dopo non più di sei mesi di pubblica propria papara all'editore o comunque dopo non più di sei mesi di pubblica propria papara all'editore o comunque dopo non pi

2. L'autore rimane titolare del diritto di cui al comma 1 anche nel caso in cui abbia ceduto in via esclusiva i diritti di utilizzazione economica della propria opera all'editore o al curatore. Le clausole contrattuali pattuite in violazione di quanto disposto dal comma 1 sono nulle».





3. Italy. Italian publishers' lobbying



A.S. 1146

Modifiche all'articolo 4 del decreto-legge 8 agosto 2013, n. 91, convertito, con modificazioni, dalla legge 7 ottobre 2013, n. 112, in materia di accesso aperto all'informazione scientifica.

Nota dell'Associazione Italiana Editori

Conclusioni

Per le ragioni esposte, chiediamo:

Che i periodi di embargo previsti siano portati a 12 mesi per le discipline scientifico tecnico mediche e a 18 mesi per le scienze umane e sociali, per rendere sostenibile la norma per il sistema italiano della ricerca e per il sistema editoriale italiano, in un quadro di assenza di risorse aggiuntive.

Che sia cancellato il comma 2 dell'articolo unico del progetto di legge poiché il vincolo introdotto con il nuovo articolo 42-bis della legge sul diritto d'autore, applicandosi solo alle imprese italiane, le indebolirebbe nei confronti di agguerriti concorrenti stranieri e avrebbe quindi effetti negativi sul tessuto industriale del Paese.

3. Toward an European harmonization? (2022)

- Some Member States have a SPR finalized to practice Open Access (Germany, Austria, Netherland, Belgium, France)
- It is not an exception or limitation; it is a right composed by economic and moral rights finalized to practice Open Access (e.g. through Creative Commons Licences)
- It is an unavailable and inalienable right (moral right); it is not overridable by contract



Study on EU copyright and related rights and access to and reuse of scientific publications, including open access

Exceptions and limitations, rights retention strategies and the secondary publication right



Paul David (2008)

 «Open science norms and institutions are a social innovation whose workings must be continually re-created as "social facts". This regenerative process depends upon the scientific practitioners themselves recognizing that much of the "power" that their research communities possess for the successful pursuit of reliable knowledge derives from their personal appreciation of and commitment to behaviors that conform broadly to the informal "cognitive norms," as well as to the **formal regulations** governing their activities».



Paul David (2008)

 «In short, the sustained functionality of these vulnerable institutional legacies ultimately rests not in the hands of some distant, unknown and hopefully wise designers of public policy, but upon scientists' acceptance of responsibility for day-to-day individual and collective actions in support of "good scientific conduct conjoined with good technique," and for transmitting that ethos to the future scientists who look to them as mentors».



- R. Caso [2018-2022], <u>The Darkest Hour: Private Information Control and the End of Democratic Science</u>, Trento LawTech Research Papers, nr. 35, Trento, Università degli studi di Trento, 2018, in I. De Gennaro, H. Hofmeister, R. Lüfter (eds.), <u>Academic Freedom in the European Context. Legal, Philosophical and Institutional Perspectives</u>, in <u>Palgrave Critical University Studies</u> book series (PCU), Springer Nature, 2022, 259-288
- R. Caso [2020], <u>The academic copyright in the age of commodification of scientific research</u>, in SCIRES-IT SCIentific RESearch and Information Technology, <u>Volume 10</u>, <u>Special Issue (2020) Open Science: New models of scientific communication and research evaluation</u>



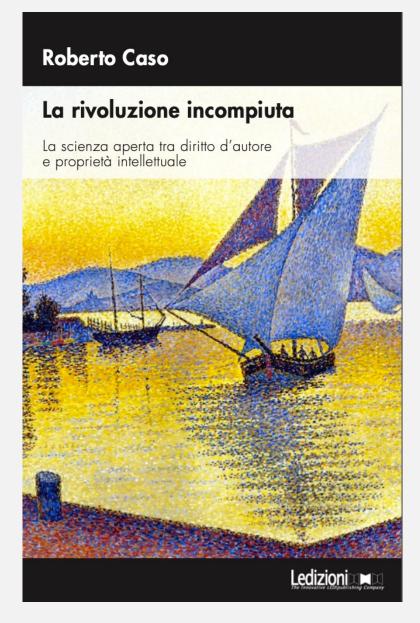
- R. Caso [2021], <u>Pandemia e vaccini. L'irrisolvibile antagonismo tra scienza aperta e proprietà intellettuale</u>, versione 2.0, 23 maggio 2021, <u>Trento LawTech Research Paper series nr. 44</u>, in <u>Rivista critica del diritto privato</u>, nr. 2/2021
- R. Caso [2021-2022], G. Dore, <u>Academic Copyright, Open Access and the "Moral" Second Publication Right</u>, <u>European Intellectual Property Review</u>, 6/2022, 332-342



- R. Caso, <u>Il diritto umano alla scienza e il diritto morale di aprire le</u>
 <u>pubblicazioni scientifiche. Open Access, "secondary publication right"</u>
 <u>ed eccezioni e limitazioni al diritto d'autore, Trento LawTech Research</u>
 <u>Paper n. 56</u>, 2023, in <u>Rivista italiana di informatica e diritto</u> 1/2023
- R. Caso, M.C. Pievatolo [2023], <u>A liberal infrastructure in a neoliberal world: the Italian case of GARR</u>, forthcoming in <u>Journal of Intellectual Property, Information Technology and Electronic Commerce</u>, 2023, Zenodo, https://doi.org/10.5281/zenodo.7561821



- R. Caso, <u>La rivoluzione</u>
 <u>incompiuta</u>. <u>La scienza aperta tra</u>
 <u>diritto d'autore e proprietà</u>
 <u>intellettuale</u>, Milano, <u>Ledizioni</u>,
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Documents

AISA

https://aisa.sp.unipi.it/attivita/diritto-di-ripubblicazione-in-ambito-scientifico/novella/

DDL 1146 (bill) XVIII L (Gallo's bill)

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AIE

https://www.senato.it/application/xmanager/projects/leg18/attachments/documento evento procedura commissione/files/000/040/901/A IE 29.10.2019 .pdf

Documents

- European Commission, Directorate-General for Research and Innovation, Angelopoulos, C., Study on EU copyright and related rights and access to and reuse of scientific publications, including open access – Exceptions and limitations, rights retention strategies and the secondary publication right, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/891665
- reCreating Europe Final Conference Booklet

https://zenodo.org/record/7774557#.ZCGNiHZBy3A

Abstract

«While much of the debate on the relationship between a human right to science and copyright focuses on the exceptions and limitations to exclusive rights and on users' rights, this presentation, on the wake of foregoing studies, argues that it is also necessary to look at other legal mechanisms. In this perspective, it is necessary to reflect on the so called "secondary publication right". This right is an essential tool to defend academic autonomy and freedom, which are increasingly at risk. It is not an exception or a user's right but rather a moral and economic author's right to open scientific texts, which is philosophically rooted on the Kantian vision of copyright (protecting the integrity of the discourse between author and public), the public use of reason and the Mertonian norms of science. The right to open scientific texts is a fundamental aspect of the human right to (open) science».



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