

Topics in Internet & Society Interdisciplinary Studies  
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# *Internet regulation by the back door?*

*Copyright and the future of the web*

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# Enforcement of copyright and related rights in the cyberspace

## *Two layers of effect*

- On the Internet as ‘content distributor’
- On the technical functioning of the Internet as such

# Basic copyright

- Exclusive right to authorize or prohibit copying
- ...and to disseminate copies to the public

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*Why? What is 'copying'? What is a copy?*

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*Why? What is 'copying'? What is a copy?*

“[copyright is] a law of public places and commercial interests”  
(P. Goldstein)

# What's wrong with copying?

*Is copying without public dissemination an infringement?*

*eg* copying for private use

*or* copying for uses that are unrelated with the normal destination of the work

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*or copying for uses that are unrelated with the normal destination of the work*

*Maybe not in principle but copying is (historically) the best 'predictor' of an intention to infringe*

by parting his Manuscript, [the Writer] has constituted a Substitute in his Stead, which speaks perpetually to the Eyes of every Reader. But, though he has given out one or a hundred Copies, has constituted one or a hundred Substitutes to speak for him; yet no Man has a Right to multiply those Copies, to make a thousand Substitutes instead of one; especially, if any Gain is to arise from such Multiplication. (W. Blackstone LJ, *Tonson v Collins*, 1762)

# Controversial cases – 1

Perforated rolls for player piano: ‘copies’ of sheets of music?  
(*Boosey v Whight*, 1900; *White-Smith Music v. Apollo*, 1908)





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Perforated rolls for player piano: ‘copies’ of sheets of music?  
(*Boosey v Whight*, 1900; *White-Smith Music v. Apollo*, 1908)

‘to play an instrument from a sheet of music which appeals to the eye is one thing; to play an instrument with a perforated sheet which itself forms part of the mechanism which produces the music is quite another thing’  
(Lindley J in *Boosey v Whight*)

These perforated rolls are parts of a machine which, when duly applied and properly operated in connection with the mechanism to which they are adapted, produce musical tones in harmonious combination. But we cannot think that they are copies within the meaning of the copyright act  
(J Day in *White-Smith Music v Apollo*)

## Controversial cases – 2

Computer programs: subsistence of copyright in object code – meaning of ‘copying a literary work’

what is the subject of copyright [...] will, although not immediately published and perhaps never published, be capable of being published and thus being seen or heard. The very idea of publishing is that something should be seen or heard. The same may be said in relation to performing a work, broadcasting a work, causing a work to be transmitted to subscribers to a diffusion service and, I think it follows, reproducing a work ... In short [...] literary works [...] must, in my opinion, be capable of being seen or heard.

Sheppard J dissent in *Apple Computer v Edge*, 1984 (AU)

# The public

- From public performance to broadcasting to ‘making available on demand’
- (From time-space simultaneity to space-shifting to time-space shifting)

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- From public performance to broadcasting to ‘making available on demand’
- (From time-space simultaneity to space-shifting to time-space shifting)

“the entire concept of ‘private copying’ makes little sense in a world where the work is predominantly marketed directly to the end users[,] . . . and the market for, or ‘normal exploitation of’, the work will by and large be the private copying market” (J. Ginsburg, 1995)

# The internet

# 'Digital copyright' (Litman 2000)

1. Economic rights of authors and related rights owners are extended *as such* to the Internet.
2. Authors and related rights owners have the exclusive right to control the communication of their works on the Internet.
3. Authors and related rights owners can adopt technological measures of protection which are in turn legally protected.

# ‘Digital copyright’ – reproduction

- Reproducing the work in any manner and form is an infringement
- Both permanent and temporary copying is infringing
- *However* certain acts of copying that are purely technology-dictated are exempted

*see InfoSoc Directive, Art. 5(1) – five cumulative conditions (technical rather than functional approach to copying)*

# The case with copy-reliant technologies

= technologies that operate on the basis of routine, automatic and indiscriminate copying of works *en masse*



# The case with copy-reliant technologies

= technologies that operate on the basis of routine, automatic and indiscriminate copying of works *en masse*

- ❑ Media monitoring (Google News, Meltwater, Infopaq...)
- ❑ Web scraping / crawling (Expedia, Ciao...)
- ❑ Indexing and search (search engines, digital libraries)
- ❑ Search engine applications (e.g statistical machine translation)
- ❑ Text mining (iParadigms)
- ❑ Mass digitization projects (Google Books, HathiTrust, Internet Archive, Europeana...)

# What's in a web page *(and why we should worry)*

	<i>Possibly protected by...</i>	<i>Direct liability</i>	<i>Secondary liability</i>
Texts, images, sounds, news items,...	Copyright	Copying / making available	
Personal data	Data protection	Processing	Facilitating, inducing, countenancing,
Information or data organized in a systematic way	Copyright / database right	Extraction and/or reutilization	“turning a blind eye towards”... an infringing act
All the above (+ non-IP protected content / services)	Contract (click-wrap)	Breach of contract	carried out by third parties
Access control measures (e.g. password, paywall)	“para-copyright” (anti-circumvention provisions)	Deliberate circumvention	

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			out by third
			es

*Safe harbour  
DMCA / e-Commerce Dir.*

# Copyright and related right infringement – updated

*Both humans and machine can infringe, BUT*

- Fair use + DMCA caching safe harbour in the USA (*Perfect 10 v Amazon, Kelly v Arriba Soft, Field v Google*)

*In EU? → Caching defence (Dir. 2000/31/EC, art. 13),*

*No passe-partout exemption from direct infringement, BUT:*

- Doctrine of implied consent – BGH 29.04.2010 (*Vorschaubilder I*); BGH 19.10.2011 (*Vorschaubilder II*)
- “*ius usus innocui*” – Spanish Supreme Court, n 172/2012, 3 April 2012

# ‘Consent architecture’ – robots.txt

Robots exclusion standard (robots.txt) or Noindex/NoArchive tags are text files stored in the root directory of a website that instruct crawlers which directories of a website not to index.

- Ignoring robot.txt exclusions can lead to trespassing claims in the US (eBay v Bidder’s Edge 100 F. Supp. 2d 1058 (N.D. Cal. 2000) Intel Corp. v. Hamidi, 71 P.3d 296, 308–09 (Cal. 2003))

*And in Europe?*

- Right to “opt out” when personal data area published – search engines must respect opt-outs expressed by website editors through robots.txt (Article 29 Working Party, Opinion 1/2008 on data protection issues related to search engines)
- *However:* not an “effective technological measure” of a database but mere “etiquette” (Court of Appeal Arnhem (NL), 4 July 2006)

# The end of the 'consent architecture'?

- New 'informational capitalism'
- Technological and legal (contractual) control over access to online content
- *Plus* control over automated access and uses made possible by Big Data
- The role of copyright and related rights in a post-copyright environment

# Hyperlinking



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UTC/GMT -5 ● 24H ● AM/PM 10:39:32pm

6:50pm Copa Sudamericana: Fluminense FC - LDU de Quito
7:00pm Liga de Bolivia: Real Potosí - The Strongest
7:00pm Basket (NBA): Milwaukee - Washington
7:00pm Basket (NBA): NY Knicks - Orlando
7:00pm Basket (NBA): Phoenix - Cleveland
7:00pm Basket (NBA): Toronto - Atlanta
7:00pm Hockey (NHL): Tampa Bay - Boston
7:00pm Hockey (NHL): Vancouver - New Jersey
7:30pm Basket (NBA): Dallas - New Jersey
7:30pm Hockey (NHL): Colorado - Florida
7:45pm Clausura de Chile: La Serena - Colo Colo
8:00pm Basket (NBA): Detroit - Chicago
8:00pm Basket (NBA): Memphis - Minnesota
8:00pm Basket (NBA): Philadelphia - Oklahoma City
8:00pm Hockey (NHL): Nashville - Minnesota
8:30pm Promoción de Colombia: Bucaramanga - Pereira
9:00pm Apertura de Guatemala: Comunicaciones - Marquense
10:00pm Apertura de México: Morelia - Cruz Azul
10:00pm Basket (NBA): Indiana - Sacramento
10:30pm Basket (NBA): Houston - LA Clippers

Lun 30 Nov 2009 - Vie 3 Dec 2009 >>>

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[Liga: Xerez - Barcelona 2/12/09](#)

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[Europa League: Levski vs Villarreal CF \(02-12-...](#)

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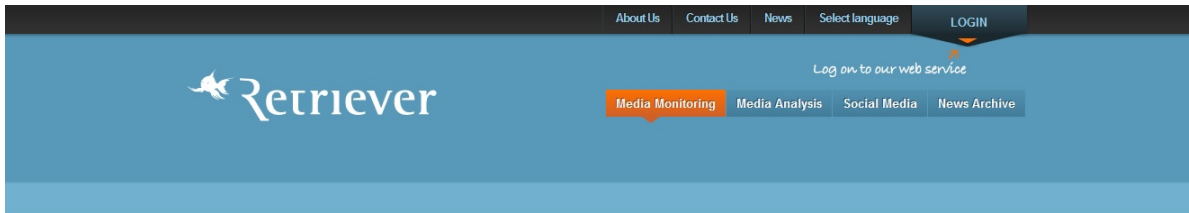
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Members of BPI (British Recorded Music Industry) Limited and of Phonographic Performance Limited	KAT or Kickass Torrents websites
Members of BPI (British Recorded Music Industry) Limited and of Phonographic Performance Limited	H33t
Members of BPI (British Recorded Music Industry) Limited and of Phonographic Performance Limited	Fenopy
Members of the MPA (Motion Picture Association of America Inc)	Movie2K / Movie4K Download4All
Members of the MPA (Motion Picture Association of America Inc)	EZTV
The Football Association Premier League Limited	First Row Sports
Members of BPI (British Recorded Music Industry) Limited and of Phonographic Performance Limited	Abmp3 BeeMp3 Bomb-Mp3 eMp3World Filecrop Mp3Juices Mp3lemon Mp3Riad Mp3skull NewAlbumReleases Rapidlibrary
Members of BPI (British Recorded Music Industry) Limited and of Phonographic Performance Limited	1337x BitSnoop ExtraTorrent Monova TorrentCrazy TorrentDownloads TorrentHound

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→ *Thumbnail*

*Underlying reproduction of the original content for indexing and caching*

# What's in a hyperlink

- = a link from a hypertext document to another location, activated by clicking on a highlighted word or image.
- Facilitate and speed-up access to a resource available online
- Linking / Deep linking / Framing / Embedding

# Legal issues with hyperlinking

## In the US

- Deep linking and reproduction in reduced-size copies (thumbnails) are both fair use
- Linking and framing are generally exempted under the fair use doctrine

*(Kelly v Arriba Soft, Perfect 10 v Amazon, ....)*

# Legal issues with hyperlinking

## European courts (before *Svensson*)

- Generally not a direct infringement – neither ‘reproduction’ nor an autonomous ‘communication to the public’
- Occasionally protected under freedom of press and freedom of speech
- Infringing only in special cases (e.g. the material is otherwise unfindable by the public; the material is “obviously illegal”)
- Some courts in Nordic countries found direct infringement (linking to streaming sport events)



# CJEU *Svensson*

Hyperlinking is an independent act of communication, *but...*

Infringement only if the communication meets certain criteria:

- The original communication is subject to access protection mechanisms
- The communication reaches a new public
- The communication affects the market for the original work.

*Svensson and Others v Retriever Sverige AB (C-466/12)*

# Consequences of *Svensson*

- Hyperlinks to freely available content are permitted
- However, hyperlinking is ‘communication’ – albeit not necessarily ‘to the public’
- How to make sure your hyperlinks are non-infringing?
- More copying and less hyperlinking?
- New CJEU referral on this issue (*GS Media*) – direct vs. indirect infringement

# Web crawling / scraping

# Crawling / scraping

- Web crawling → *systematic browsing for the purpose of indexing*
- Data scraping / screen scraping → *extraction of data (or other information) from human-readable outputs of a website (e.g. search module of airline companies)*

# The issue with scraping

wegolo We Fly Low Cost

wegolo.com Ticket 0 042003

from: London (LON)  
to: Paris (PAR)

Flights Rent-a-Car Hotels & Hostels Help & Contact My Wegolo

English

Flight Search

Flight Search

Search Result

Departure Date: 6/18/2015  
Return Date: 6/30/2015  
1 Adult (> 11 years)  
0 Children  
0 Infants  
EUR

Search Flight

	From	Departure	Stops	To	Arrival	Duration	Fare	Price	Airline
<input type="radio"/>	London Gatwick (LGW)	6:55 AM	0	Milan (MXP)	9:50 AM	01:55	88.28 EUR	<b>109.23 EUR</b>	easyJet
<input type="radio"/>	London Stansted (STN)	8:05 AM	0	Bergamo (Milan) (BGY)	11:05 AM	02:00	111.21 EUR	<b>113.43 EUR</b>	RYANAIR
<input type="radio"/>	London Luton (LTN)	6:20 PM	0	Milan (MXP)	9:20 PM	02:00	103.39 EUR	<b>124.64 EUR</b>	easyJet
<input type="radio"/>	London Gatwick (LGW)	8:15 AM	0	Milan (MXP)	11:10 AM	01:55	103.39 EUR	<b>124.64 EUR</b>	easyJet
<input type="radio"/>	London Heathrow (LHR)	2:05 PM	1	Milan (MXP)	7:45 PM	04:40	119.99 EUR	<b>129.99 EUR</b>	germanwings
<input type="radio"/>	London Gatwick (LGW)	1:20 PM	0	Milan (LIN)	4:15 PM	01:55	137.72 EUR	<b>159.66 EUR</b>	easyJet
<input type="radio"/>	London Stansted (STN)	4:00 PM	0	Bergamo (Milan) (BGY)	7:00 PM	02:00	157.90 EUR	<b>161.05 EUR</b>	RYANAIR
<input type="radio"/>	London Luton (LTN)	1:05 PM	0	Milan (MXP)	4:05 PM	02:00	143.21 EUR	<b>165.26 EUR</b>	easyJet

# Database right and access to information

- Protected by copyright and *sui generis* database right (Database Directive, 96/9/EC)
- *Sui generis* database right = Exclusive right to ‘extract and/or re-utilize substantial parts of a database’
- ‘Sole-source databases’ normally unprotected by the *sui generis* right (investment in ‘creation’ of data alone not sufficient to confer protection: CJEU *BHB* 2005, C-203/02)
- Mandatory exceptions to guarantee the “right of lawful users” – not contractually overridable (Dir. 96/9/EC, art. 6, 8 and 15)

# Meta-search engines and the database right

Directive 96/6, Art. 7(1) (*sui generis* database right)

‘Meta search engines’ infringe database right if they

- I. offer the same functionalities as
- II. transfer data in real time from
- III. present results in an order that reflects similar criteria as those of...

...the search engine of a protected database.

Innoweb v Wegener, Case C-202/12 [2013]

## CJEU *Ryanair*

- Art 15 (non-overrideability of 'lawful use' exception) not applicable to non-protected databases.
- *Ergo* : lawful use of a database can be restricted by contract *if the database is not protected by copyright or sui generis right!*
- *Logic?*



# Consequences of *Ryanair*

- The end of meta-search engines?
- Access to information regulated by unilateral contact.
- Are contractual restrictions on automated access ('screen scraping') enforceable?
  - YES: *Ryanair Ltd v Billigfluege.de*, High Court (Ireland), 26 February 2010
  - NO: *Ryanair v Atrapálo* Spanish Supreme Court, 572/2012; *Cheaptickets.de v Ryanair*, BGH (Germany), 2014

# Summary and conclusion

- Copyright and related rights enforcement impact upon the very structure of the internet (not only upon the way we access content online)
- This is not the purpose of copyright
- Absent internet regulation, the future Internet will be the more and more shaped by (conflicting) private interests