



Al and Copyright

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EU "Al for Europe [COM(2018) 237 final, 25.04.2018]

... increase investments in AI (Horizon 2020, attract private investment),

... make more data available and more data sharing (deep-learning algorithms need the use of large data sets); industrial data-platforms offering high quality data sets;

... ensure an appropriate ethical and legal framework (but copyright is not even mentioned!),

...create a multi-stakeholder platform (European Al Alliance) "to share best practices, encourage private investments and activities related to the development of Al"; an Al-on-demand platform to give support and easy access to "the latest algorithms and expertise" by users and businesses; Al innovation hubs to facilitate testing and experimentation;

in order to "place the power of Al at the service of human progress."

Are © laws prepared to meet this challenge?



STRONG" AI

Algorithms that think, make decisions, solve problems and learn

Deep learning / neural networks







Google DeepMind

"Weak" Al

"Trained" algorithms to solve real-life problems and produce information that may be crucial for the advancement of science, culture, society



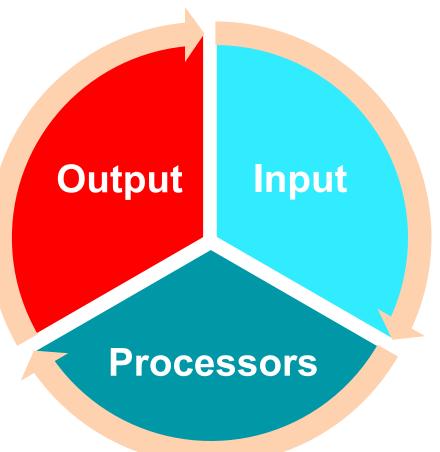
- New Datasets
- Compilations
- Translations

. .

Derivative works? (who owns Al outputs?)

- Open or "Locked"
- DRM
- PSI
- E&L? Art.5.1 ISD
- No E&L for AI
- If any ... DRM
- No fair use?
- Licensed (EULAs)
- CMOs licensing
- Open licensing
- "Conditions of use"

Al projects



- Software protected by ©
- Functional algorithms?
- Databases
- → Art.5.6.7 CPD : Mandatory exceptions

- Works
- Performances
- Recordings
- Data (unprotected)
- Datasets
- Works in public domain
- Digital or Digitized
- Open or "Locked"
- DRM
- → "Treated" (tagged)
- E&L? Art.5.1 ISD
- No E&L for Al
- If any ... DRM
- No fair use?
- Licensed (EULAs)
- CMOs licensing
- Open licensing
- "Terms of service"

COMPUTER PROGRAMS	WORKS / Subject Matter / sui generis
E&L: Art.5-6 CPD For "lawful user" (mandatory) Load, run, correct (* rec 13) Back-up copy Reverse-engineering Decompilation (interoperability with other software and hardware)	E&L: Art.5 ISD Art.5.1 – temporary copying (mandatory) Optional for MS (poorly harmonized) No E&L for Al // No Fair use Art.3 Proposed Dir. CDSM (TDM for scientific research not retained, lawful access, DRM) Art.3a (optional) TDM for other purposes
DRM: Art.7.1 CPD	DRM: Art.6 ISD
 Putting into circulation & Possession for commercial purposes, with knowledge, infringing copies PIC or PCP any means "solely" intended to remove or circumvent any "technical device" protecting a computer program 	 TPM: Control access & copying Art.6.1: Circumvention, with knowledge Art.6.2: Preparatory activities advertised, used or aimed at circumvention (rec.48: proportionality)
"interface" DRM / E&L: Art.5-6 CPD	"interface" DRM/ E&L: Art.6(4) ISD
For "lawful user": Load, run, correct (* rec 13) Back-up copy Reverse-engineering Decompilation (interoperability with other software and hardware)	 Voluntary measures by Rightholder In absence: appropriate measures adopted by MS only for 7 E&L! → arbitration, jurisdiction, etc. Art.6(4)4 Not applied to copies "on demand" Art.3 Proposed CDSM: lawful access + DRM Art.6 Proposed CDSM = no contract-out + Art.6(4) ISD
Mandatory (cannot be contracted-out)	but Art.6(4).4 does not apply (copies on demand)



LICENSING NEEDED for AI

Software

Free software licensing (GPL) prohibits the use of TPM ... but Enforcement! ... and copyleft! Google AI - Apache license EU recommends EUPL (open source, no copyleft)

Works and Datasets

Open licensing (CC) ... SA, NC, ND do not favor reuse / investment For PSI: EU COM recommends CC0 (flexibility, interoperability)

'Guidelines on recommended standard licences, datasets and charging for the reuse of documents' (2014/C 240/01)

Problems with Licensing

- → Need to reuse Al results (derivative works)
- → Interoperability (if any! EULAs!)
- → Unequal opportunities for market agents ...

Big tech companies license inputs (training data) from end-users – "terms of service" competitive advantage over other (start-ups) (EU AI initiative: platforms, best practices)



What have we learned?

Copyright will play a decisive role in Al markets (services and products)

Bottom-up (best practices) ... open licensing by business, by governments, etc ... **licensing is insufficient**, unpredictable and complex (interoperability)

- © laws should find the "right" solution for AI (meet needs)
- ... in order to "place the power of AI at the service of human progress."

One solution? E&L (with strong "interface" with DRM) or statutory licenses

If we really want to incentivize machine reading of expressive works and datasets... © law should provide for strong, clear E&L (or statutory licensing), safeguarded from DRMs and contracts.

So far, it does not look promising.

Another solution?

"Copyright ignores robots" (Grimmelmman)

(as a criticism: romantic authorship ... romantic readers!)

- ... is "machine reading" an act of exploitation? (has reading ever been?)
- ... "exploit work as a work" (Strowel)!
- ... AG in Cordoba ... in favor of a "restrictive" reading of exclusive rights!



Other deterrents, in addition to ©: Personal Data (GDPR)

Reuse of PSI (Al initiative) → obligation to safeguard © and personal data protection/privacy

"safeguarding" is not enough to incentivize PSI reuse / AI initiatives

Need to *exempt* specific machine reading uses of **works/personal data**... which do not have a negative impact on the protection of these interests? ... which ones?

Law should do more to encourage AI (and PSI) ... and do it coherently!





WE ACCEPT THE TERMS AND CONDITIONS OF PRIVACY

R&I



Thanks!

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