AI and Copyright

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… 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 AI Alliance) “to share best practices, encourage private investments and activities related to the development of AI”; an AI-on-demand platform to give support and easy access to “the latest algorithms and expertise” by users and businesses; AI innovation hubs to facilitate testing and experimentation;

in order to “place the power of AI 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

“Weak” AI
“Trained” algorithms to solve real-life problems and produce information that may be crucial for the advancement of science, culture, society
AI projects

- New Datasets
- Compilations
- Translations

... Derivative works? (who owns AI outputs?)

- Open or “Locked”
- DRM
- PSI

Output

- Works
- Performances
- Recordings
- Data (unprotected)
- Datasets
- Works in public domain

Input

- Digital or Digitized
- Open or “Locked”
- DRM

→ “Treated” (tagged)

Processors

- 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”
- Software protected by ©
- Functional algorithms?
- Databases

→ Art.5.6.7 CPD : Mandatory exceptions

- E&L? Art.5.1 ISD
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- Open licensing
- “Terms of service”
<table>
<thead>
<tr>
<th>COMPUTER PROGRAMS</th>
<th>WORKS / Subject Matter / sui generis</th>
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<tr>
<td><strong>E&amp;L: Art.5-6 CPD</strong>&lt;br&gt;For “lawful user” (mandatory)&lt;br&gt;- Load, run, correct (* rec 13)&lt;br&gt;- Back-up copy&lt;br&gt;- Reverse-engineering&lt;br&gt;- Decompilation (interoperability with other software and hardware)</td>
<td><strong>E&amp;L: Art.5 ISD</strong>&lt;br&gt;Art.5.1 – temporary copying (mandatory)&lt;br&gt;Optional for MS (poorly harmonized)&lt;br&gt;No E&amp;L for AI // No Fair use&lt;br&gt;Art.3 Proposed Dir. CDSM (TDM for scientific research, not retained…, lawful access, DRM)&lt;br&gt;Art.3a (optional) TDM for other purposes</td>
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<td><strong>DRM: Art.7.1 CPD</strong>&lt;br&gt;- Putting into circulation &amp; Possession for commercial purposes, with knowledge, infringing copies&lt;br&gt;- PIC or PCP any means “solely” intended to remove or circumvent any “technical device” protecting a computer program</td>
<td><strong>DRM: Art.6 ISD</strong>&lt;br&gt;&lt;br&gt;&lt;br&gt;TPM: <strong>Control access &amp; copying</strong>&lt;br&gt;- Art.6.1: Circumvention, with knowledge&lt;br&gt;- Art.6.2: Preparatory activities… advertised, used or aimed at circumvention (rec.48: proportionality)</td>
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<td><strong>“interface” DRM / E&amp;L: Art.5-6 CPD</strong>&lt;br&gt;For “lawful user”:&lt;br&gt;- Load, run, correct (* rec 13)&lt;br&gt;- Back-up copy&lt;br&gt;- Reverse-engineering&lt;br&gt;- Decompilation (interoperability with other software and hardware)</td>
<td><strong>“interface” DRM/ E&amp;L: Art.6(4) ISD</strong>&lt;br&gt;- Voluntary measures by Rightholder&lt;br&gt;- In absence: appropriate measures adopted by MS … only for 7 E&amp;L! → arbitration, jurisdiction, etc.&lt;br&gt;- Art.6(4)4 Not applied to copies “on demand”&lt;br&gt;&lt;br&gt;Art.3 Proposed CDSM: lawful access + DRM&lt;br&gt;Art.6 Proposed CDSM = no contract-out + Art.6(4) ISD but Art.6(4).4 does not apply (copies on demand)</td>
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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 AI 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 AI 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” (GrimmelImman)
(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** (AI initiative) $\Rightarrow$ 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
Thanks!

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