Less Is More: Some Undesirable Consequences Of Affording EU Copyright Protection To Artificial Intelligence Creations

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REMBRANDT

THE NEXT REMBRANDT

- Similarities (qualitative):

  « As humans beings recede from direct participation in the creation of many works, continued insistence on human authorship as a prerequisite to copyright threatens the protection – and, ultimately, the production- of works that are **indistinguishable in merit and value** from protected works created by human beings » (Denicola (2016), p. 269)

- Differences (quantiative):

  « **AI-generation of new creation** based on a training set **can be unleashed** with little marginal costs, and can explore any kind of combinations and variations » (Sartor, Lagioa, Contissa (2018), p. 12)

- Author = human being
  - « (...) an author is a human being who exercises subjective judgment in composing the work and who controls its execution » (Ginsburg 2003, p. 1066)

- Machine = not an author
  - But *see* European Parliament resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL))
    - « electronic personality »
    - Not followed by the Commission

- Copyright protection is tailored on the capabilities of a human being
  - Natural rights justification of copyright (cf. originality)
    - *Contra*: inapplicable
  - Duration is function of a human life
    - *Contra*: inapplicable
  - Moral rights are intimately linked to personality
    - *Contra*: inapplicable
  - **Long term exclusive rights designed to cover the costs of creation**
    - *Contra*: « AI-generation of new creation based on a training set can be **unleashed with little marginal costs**, and can explore any kind of combinations and variations » (quantitative difference)
- **CCL: copyright protection is meant for humans and probably not fit for AI production**

- Hypothesis of EU copyright protection for AI production
  - Originality?
  - Machine Learning?
  - International Competition?

- **« Free and creative choices »**
  - o Globally : converging criteria (Gervais, pp. 976-977)
  - o *See* CJEU : « where the expression of those components is dictated by their technical function, the criteria of **originality is not met, since the different methods of implementing an idea are so limited that the idea and the expression become indissociable** » (*BSA*, C-393/09, § 49)
    - = *merger doctrine US :* « **When the 'idea' and its 'expression' are (…) inseparable, copying the 'expression' will not be barred**, since protecting the 'expression' in such circumstances would confer a monopoly of the 'idea' upon the copyright owner free of the conditions and limitations imposed by the patent law »
    (Herbert Rosenthal Jewelry Corp. v. Kalpakian (9th Cir. 1971))

- Comp. *merger doctrine* US, no copyright protection when :
  - From the situation where only one way to express an idea
    - *(Herbert Rosenthal Jewelro Corp. v. Kalpakian* (9th Cir. 1971))
  - **Limited number of ways to express an idea**
    - « When the uncopyrightable subject matter is very narrow, so that 'the topic necessarily requires', **if not only one form of expression, at best only a limited number**, to permit copyrighting would mean that a party or parties, by copyrighting a mere handful of forms, **could exhaust all possibilities of future use of the substance**. In such circumstances it does not seem accurate to say that any particular form of expression comes from the subject matter. However, it is necessary to say that the **subject matter would be appropriated by permitting the copyrighting of its expression**. We cannot recognize copyright as a game of chess in which the **public can be checkmated** » (*Morrissey v. Procter & Gamble Co.* (1st Cir. 1967))

- Comp. EU Trademark and Design law, no protection when:
  - Only one way to obtain a technical result
    - Art. 7(1)(e)(ii) regulation 2017/1001 (Trademark)
   - Art. 8(1) regulation 6/2002 (Design)
  - **Limited number of ways to obtain a technical result**
    - « Multiplicity of forms » approach rejected by the CJEU
      - *Lego*, C-48/09 P, §§ 53-60 ; *Philips*, C-299/99, §§ 81-83 (Trademark)
      - *DOCERAM*, C-395/16, § 30 (Design):

        « (…) **if the existence of alternative** designs fulfilling the same function as that of the product concerned **was sufficient in itself to exclude the application of Article 8(1)** of Regulation No 6/2002**, a single economic operator would be able to obtain several registrations** as a Community design of different possible forms of a product incorporating features of appearance of that product which are exclusively dictated by its technical function. That would **enable such an operator to benefit**, with regard to such a product, **from exclusive protection** which is, in practice, equivalent to that offered by a patent, but without being subject to the conditions applicable for obtaining the latter, **which would prevent competitors** offering a product incorporating certain functional features or limit the possible technical solutions, thereby depriving Article 8(1) of its full effectiveness. »

- *Rationale*: avoiding all expressions/forms necessary to express an idea/obtain a technical result to be appropriated

- But, « AI-generation of new creation based on a training set can be **unleashed** with little marginal costs, and **can explore any kind of combinations and variations** »

- **CCL: if AI can envisage all possible expressions/forms, affording copyright protection to AI production would reach the consequences that « free choice » rationale seek to avoid**

MACHINE LEARNING
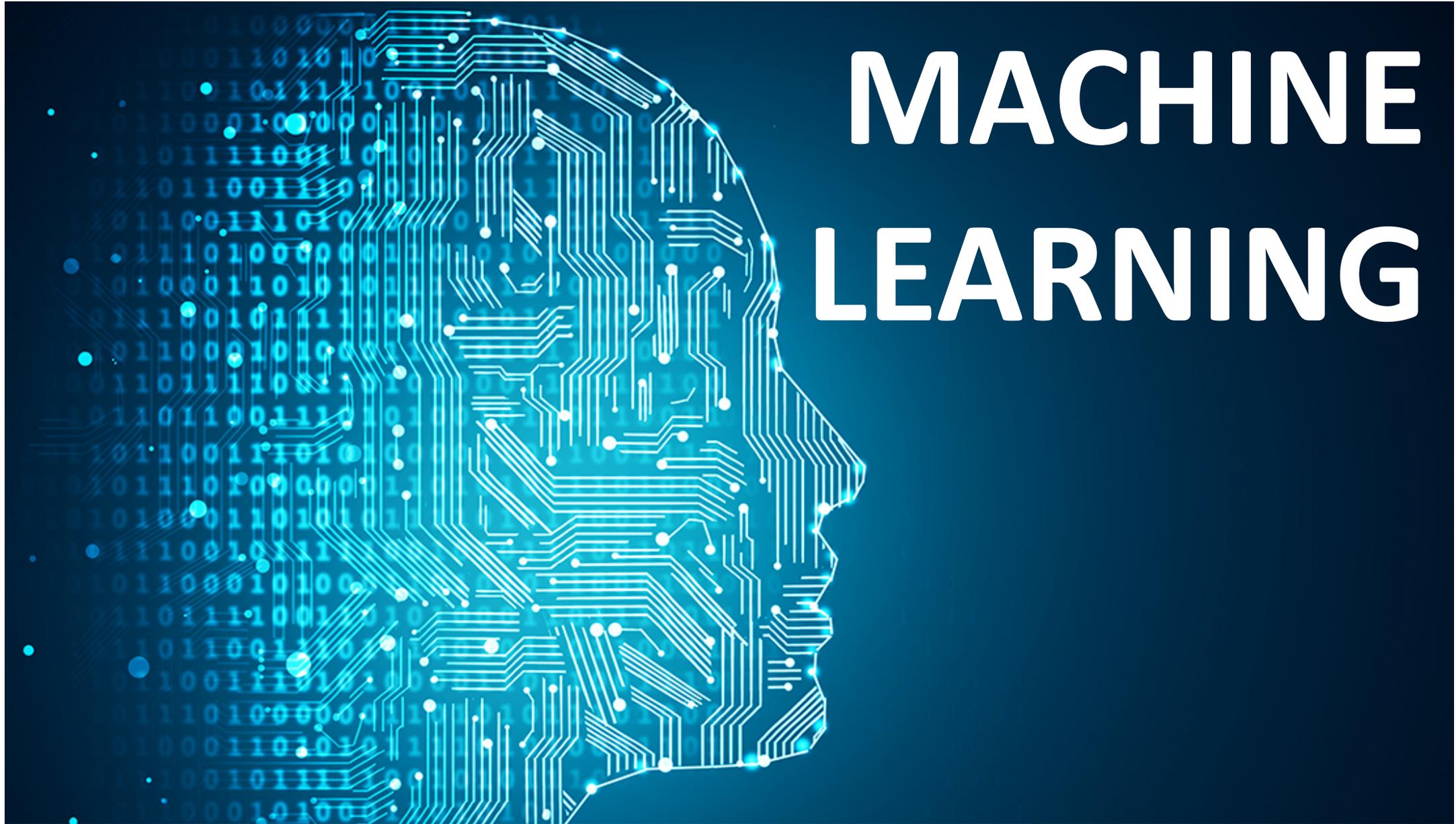
- « Artistic works become **inputs** for a data-mill » (Sartor *e.a.*, p. 3)
- Machine Learning = reproduction ?
  - Comp. CJUE, *Infopaq*, C-5/08, § 51
    - « (...) **an act occurring during a data capture process, which consists of storing an extract of a protected work** comprising 11 words and printing out that extract, **is such as to come within the concept of reproduction** in part within the meaning of Article 2 of Directive 2001/29, if the elements thus reproduced are the expression of the intellectual creation of their author; it is for the national court to make this determination »
- Machine learning = infringement ?
  - *See* art. 4(3) directive 2019/790 (TDM)
    - **Can be limited** : « (...) apply on **condition that the use** of works and other subject matter referred to in that paragraph **has not been expressly reserved** by their rightholders in an appropriate manner, such as machine-readable means in the case of content made publicly available online »
- Machine learning = licences when no exception ?
  - *See* ECJ, *Magill*, C-241/91 P and C-242/91 P; *IMS Health*, C-418/01
    - **Refusal to grant a licence for IP** by an undertaking in a dominant a position is **not abusive, unless**: (1) it prevents the emergence of a new product for which there is a potential consumer demand, (2) it is unjustified, (3) it excludes any competition on a secondary market

- Like artistic works, AI production might « become inputs for a data-mill »

- **CCL: since AI production might serve as inputs for machine learning, affording copyright protection might run encouter its development in the EU (because infringing or not subject to licences)**

INTERNATIONAL COMPETITION

- Competitive International Landscape
  - « (…) define the way forward to ensure that the EU as a whole can **compete globally** (…) » (Communication EU Commission, « Artificial Intelligence for Europe » (COM(2018) 237 final, p. 4)

- Copyright protection outside of the EU
  - National treatment Berne Convention, art. 5(1) : « **Authors shall enjoy**, in respect of **works for which they are protected under this Convention**, in countries of the Union **other than the country of origin**, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specially granted by this Convention »
    - « (…) because lack of human authorship would disqualify such outputs from Berne subject matter under Art. 2, **other Berne members incur no obligation to protect purely coputer-generated works even if their countries of origin choose to cover them by copyright** (…) » (Ginsburg 2018, p. 134-135)
    - => copyright protection to AI production limited to country of origin

- TDM exceptions outside of the EU

	EU	China	USA	Japan
TDM	Art. 3 (scientific research) and 4 (general) Dir. 2017/790	Closed list, no TDM but law under revision and possible « fair use/fair dealing »	17 USC 107 (*fair use*, after *Authors Guild v. Google Inc.*, 804 F.3d 202 (2d Cir. 2015)	Art. 30-4 Japanese Copyright Act (exception 'not for enjoying the idea or emotions expressed in a work)
Reach	**Limited**	« Chinese courts have realised the disadvantage of limiting fair use to enumerated circumstances and brought in a **more flexible approach for finding fair** use by learning from their US counterparts » (Wang, He, p. 23)	« **Uses involving robotic readers are fast-tracked for fair use** » (Grimmelmann, p. 667) ; but doubts as to « expressive machine learning » (Sobel, pp. 66-79)	« **Japan as a paradise for machine learning** » (Ueno)

- EU vs. China/USA/Japan :
  - Berne Convention: If IA production protected in EU, not necessarily in China/USA/Japan
  - TDM exceptions: Copyrighted AI production might be widely used for machine learning in some countries (China?, USA, Japan), not in others (China?, EU)
  - => if IA production is protected in EU, not necessarily in China/USA/Japan and even so, exception available
- **CCL: copyright protection for AI production in EU not necessarily likely to provide with a competitive advantage when confronted to China/USA/Japan, to the contrary**

- AI production « as such » should remain in the public domain

- AI production « implemented » in a human creation might be protected

  o In theory, yes : « It is only through the choice, sequence and combination of those [AI productions] that the [human] author may express his creativity in an original manner and achieve a result which is an intellectual creation (comp. CJEU, *Infopaq*, C-5/08, § 45)

  o In practice, most of the concerns for AI production "as such" remain and legal uncertainty since the distinction computer-assisted works/computer generated works is more of a *continuum* rather than a dichotomy (McCutcheon, p. 929)

- CJEU, 12 september 2019, *Cofemel*, C-683/17, §§ 37-38
  - o « In this respect, it should be noted at the outset that, under **Article 17 (2) of the Charter** of Fundamental Rights of the European Union, intellectual property shall be protected.
    It follows from the wording of this provision that objects constituting intellectual property enjoy protection under Union law. However, **it does not follow that such objects or categories of objects must all benefit from identical protection**. »

- **CCL: AI production is (quantitatively) different from Human production and if IP protection is evidenced as necessary, then less protection than copyright might prove better to avoid undesirable consequences**

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Less is More

Thank you for your attention !

谢谢您的关注！

(Disclaimer : Google translation…)

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