THE (EUROPEAN) ARTIFICIAL INTELLIGENCE (R)EVOLUTION: ARE TRUSTWORTHINESS, LAW, ETHICS, AND ROBUSTNESS, ENOUGH FOR (RE)LIABILITY?

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E. Abstract Internet Law Works-in-Progress 2020

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The European Commission qualifies AI as a "game changer" and a European Independent High-Level Expert Group on AI (AI HLEG) witnesses an "AI driven world." Every "traditional lawyer and law professor" would expect that if the game and the world changes and a new "driver" appears on the scene (deus et dea et machina?) new law would evolve. Hence, especially (primary) law (on the European Union level) would change as well. However, as we all know, constitutional amendments or an adaption of European Union (primary) law for an AI augmented world (own terminology) or a "robot world" have not materialized yet.

We do not see a mutation, innovation, evolution or revolution of legal systems at present. However, it is necessary to create new legal settings in order to alleviate concerns of the public and of relevant industries alike when it comes to questions of liability for (un-)foreseen negative consequences caused by robots as well as AI systems. Defining robot and AI systems and designing a legal framework for liability are a prerequisite for reliability. A lack of legal certainty threatens to stymie users as well as innovators in the design, production, distribution, merchandising and maintenance sector. Concerns regarding (un-)foreseeable risks (liabilities) and attempts at limiting liability are obvious as well as understandable.

Hence, new and holistic approaches to qualify and evaluate AI systems and robots are of highest importance. The AI world concept of the AI HLEG tackles this innovation barrier in 2019 by establishing the here so called "LER and FRA Formulas." "FRA" is an acronym for "Foundations,", "Realization," and "Assessment." The lawful, ethical and "robust" quality of AI systems ("LER Formula") gets the meaning of a "Foundation" for a future brand called "Trustworthy AI for Europe." Not only does this lay the AI Foundation, moreover, it also establishes that technical and non-technical measures have to be used to fulfill these fundamental requirements. Last but not least, the design of a "check-list" for AI is groundbreaking not only for AI systems but also for robots (e.g. autonomous vehicles). This "Assessment List" is currently in the process of interactive governance and feedback. Even in its first version, it might plaster the path towards a new "liability, accountability, responsibility law" for AI as well as for robots ("EGEGfTAI-I-2019", p. 26 continuing). Summing up: Creating "ethical" (not legal) rules at the forefront of developments and attempts at escaping traditional legal liability does not suffice if revolution and technophobia are the consequence in the aftermath of (possibly high) risk applications in industry and society. Consequently, the first priority of law (as part of LER) is the development of a liability regime, especially in procedural law (such as administrative and civil procedure). The European Union and the Member States have to face the challenge dealing with "rogue" systems (AI systems that have no connection with a liable subject or that operate outside of causality principles linking a liable human subject [developer, producer, owner etc.] to a harmful outcome due to autonomous choices / behavior). 21

It is a matter of interpretation whether AI is revolutionary or evolutionary, which is why we chose the denomination "(R)Evolution".

The authors have competencies in German and European Union law and Georg Gesk has excelled in Chinese law as well. For the audience of the Internet Law Works-in-Progress conference, the authors selected nine European Union documents: (1) "Building a European Data Economy" COM(2017) 9 final, 2017/01/10 (EDE-COM-I-2017); (2) "Artificial Intelligence for Europe" COM(2018)237 final, 2018/04/25 (AIFE-COM-I-2018); (3) "Coordinated Plan on Artificial Intelligence" COM(2018)795 final, 2018/12/07 (CPAI-COM-II-2018); (4) "Building Trust in Human-Centric Artificial Intelligence" COM(2019)168 final 2019/04/08 (HCAI-COM-I-2019); (5) "Ethics Guidelines for Trustworthy AI" 2019/04/08 (EGEGfTAI-I-2019); (6) "Definition of AI: Main capabilities and disciplines" 2019/04/08 (EGDoAI-I-2019); (7) "Policy and Investment Recommendations for Trustworthy AI" 2019/06/26 (EGPaIRfTAI-I-2019). (8) Report with recommendations to the Commission Civil Law Rules on Robotics, 2015/2103(INL), European Parliament, Rapporteur: Mady Delvaux (S&D, Luxembourg) (2016/05/31)] (9) European Parliamentary Research Service, Study, A common EU approach to liability rules and insurance for connected and autonomous vehicles, Author: Tatjana Evas, PE 615.635 February 2018.

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