Facing the Golem: Disruptive Technologies vs Democracy in the EU Digital Single Market

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Abstract

This contribution argues in favour of a regulatory framework that is aware of the threats to democracy and EU values arising from disruptive technologies. Regulation of technological innovations is an increasingly important aspect of the EU Internal Market, up to the point of shaping an entirely new field, the Digital Single Market. It is crucial to develop the regulation of technological innovations in a way that complies with EU values and does not undermine the democratic process. To develop thoughts and ideas on this subject, the paper will focus on defining disruptive technology's fundamental values and analysing the relevant body of EU secondary law. Then, the author seeks to assess the readiness of EU primary and secondary law with the risks and opportunities posed by disruptive technologies and outlines the importance of compliance with EU fundamental values for the strategic autonomy of the EU. Finally, the author presents some ideas to help the EU legal order fill the gap in the protection from threats to democracy and EU fundamental values that comes from disruptive technologies.

1 Introduction

Disruptive technologies are shaping the environment around us, changing how we interpret reality and how we work, live, and behave. The ambition to control and regulate disruptive technologies to avoid their abuse is rooted in humankind's history. One of the most fascinating examples is the Golem, a mythological figure whose traces can be found in the Bible and the Kabbalah. The Golem is a humanoid of unknown origin, usually made of clay or mud, that its master can control through a hole in his mouth, where the master

¹ Among the many references to technological innovation as 'the Golem', see H. Collins and T. Pinch, The Golem: what you should know about science (Cambridge University Press, 1993).

places a piece of paper where he writes the orders.² This legend evokes the idea that most humans have of technology: magic-like instruments to whom we give orders. However, we do not entirely understand technology and we are often worried about losing control. There are different examples of technological innovation as the Golem, some of which are unexpected. The world wide web, social media and increasingly fast communications have disrupted our habits.³ Artificial Intelligence is changing radically intellectual works. Crypto assets and decentralised finance are challenging at the roots of traditional banking and financial systems. Cybersecurity threats are more and more frequent at the individual as well as at the system level. The application of disruptive technologies thus is challenging our way of life. Moreover, doing that also challenges the very underpinning structure of our society: the values we regard as fundamental, and among them, democracy.

To further substantiate this claim it is sufficient to think how easier it is nowadays for policymakers to influence the opinion of voters. Artificial Intelligence allows politicians to write and to talk to different audiences in a language different from their original one. News manipulated *ad hoc* to foster a reaction from the public is also spread at unimaginable speed, as happens with the news coverage of migration flows in Europe. The interaction with voters and electors that once required time (to travel and meet the constituency) and research (to explain to the voters your reasons and positions) takes place at a fraction of its cost and a factorial of its speed. However, democracy is not only challenged by the potential disruption of the electoral process. It is also challenged regularly by undermining citizens' trust in traditional institutions by being less capable of securing employment, providing economic resources, and ensuring safety. If democracy as such is unable (or less able) to provide citizens with fundamental guarantees, then the structure of democratic society is challenged at its foundation.

However, similarly to what happened with the Golem, disruptive technologies are harmful to democracy only if their inventors, programmers, and users are allowed to do so. To avoid this, it is necessary to develop a technology compliant with democracy and fundamental values and to do so at the most appropriate level – the European Union. A fundamental research question dominates this paper: is it possible to ensure that disruptive technologies

² For a more detailed account of the legend of the Golem, see E. Wiesel, *The Golem: the story of a legend* (Summit Book, 1983).

³ The Commission in 2021 proposed a directive, that is now under negotiations, on the rights of platform workers. See Proposal for a Directive of the European Parliament and of the Council on improving working conditions in platform work, COM/2021/762 final.

are designed in a way that is consistent with EU democracy and fundamental values?

To do so, the paper will focus on the definition of disruptive technologies within the EU internal market (Section 9.2), of fundamental values in primary EU law (Section 9.3) and the analysis of the relevant body of EU secondary law (Section 9.4). Then, in Section 9.5, I will outline the importance of compliance with EU fundamental values for the strategic autonomy of the EU. I will also try to assess the readiness of EU primary and secondary law to deal with the risks and opportunities posed by disruptive technologies. Finally, in Section 9.6, I will present some ideas that, in my opinion, can help the EU legal order to fill the gap in the protection from the threats to democracy and EU fundamental values that can arise from disruptive technologies.

2 Disruptive Technologies and the Digital Single Market

Disruptive technologies live within a very specific part of the EU internal market that, since 2015, has been defined by the European Commission as the Digital Single Market.⁴ The Digital Single Market consists of a series of regulatory adaptations to prepare the traditional freedoms composing the EU internal market (goods, services and establishment, persons and capital) for the digital transformation.⁵ Ultimately, the role played by technological innovations in the economic life of the EU and beyond will lead to the so-called 'fourth industrial revolution', the integration of digital technologies in most aspects of life.⁶ The influence of disruptive technologies has profoundly changed the EU internal market: to provide an example, in 2022, a significant part of all sales made was done through e-commerce.⁷

Disruptive technologies can be defined in several ways, but, in general, they are understood to be different kinds of technologies that impact how our

⁴ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Digital Single Market Strategy for Europe, 6 May 2015.

⁵ See Art. 1, Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030.

⁶ See generally: European Commission, *Capitalising on the benefits of the 4th industrial revolution*, 2018, https://data.europa.eu/doi/10.2777/588385.

⁷ According to a Eurostat survey, up to 6,7% of the turnover in market in sales was done online in 2022. See Eurostat, Digital economy and society statistics – enterprises, 2024, https:// ec.europa.eu/eurostat/statistics-explained/index.php?title=Digital_economy_and_society _statistics_-enterprises#Enterprises_using_social_media.

society works and functions. The main avenue in which our society works is, so far, the concept of 'trust'. Trust underpins the functioning of our society as well as the legal (lawyers and notaries), economic (banks), political (members of the parliament), and social (e.g., civil status certificates) spheres. Our society is characterised by intermediaries that we trust and can perform different tasks on our behalf. A sworn translator performs a translation on a document in a language we do not know, a bank transfers the money of our rent (or mortgage) to our landlord, a lawyer represents us in front of a court, and we, collectively, entrust politicians to act on our behalf.

Disruptive technologies can break the link of trust that connects us with our intermediaries and replace them – or at least aspire to replace them. Artificial Intelligence allows us to translate a document instantly (without a translator); a crypto asset allows us to move a currency without a bank; a blockchain certifies the exchange of documents or the propriety of an inventoried good without needing a notary.

It is true that some of the applications of these technologies are already among us and that they have not entirely 'disrupted' yet or are simply developing in an environment where these new intermediaries are replacing the old ones. For instance, this seems to be the case with digital platforms (both e-commerce and social media platforms). These applications of technologies are replacing traditional intermediaries without eliminating them. Still, we should ask ourselves if and how we can exert the same control on these new intermediaries (or disintermediaries) as traditional ones.⁸

3 Defining Fundamental Values in Primary EU Law in the Context Applicable to Disruptive Technologies

The values included in Article 2 TEU are the benchmark for my proposed analysis. However, considering the specific character of the EU legal order, some of the values included in the list of Article 2 are more relevant than others. According to Article 2, "the Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for

⁸ One could point, perhaps, at the example of banking supervision and the depth that reached in the years after the economic crisis.

⁹ See generally T. Von Danwitz, 'Values and the Rule of Law: Foundations of the European Union – An Inside Perspective from the Ecj', *Potchefstroom Electronic Law Journal* (2018), pp. 1–17. T. L. Boekestein, 'Making Do With What We Have: On the Interpretation and Enforcement of the EU's Founding Values', *German Law Journal* (2022), 431–451.

human rights, including the rights of persons belonging to minorities". However, respecting human dignity and freedom is irrelevant to applying disruptive technologies. ¹⁰ This is because disruptive technologies in the EU internal market can rarely operate within the realm of the primary needs of persons (although, of course, we can imagine applications of disruptive technologies that can undermine freedom and human dignity). Democracy, equality, the rule of law and respect for human rights are, on the other side, extremely relevant in the vast majority of cases where disruptive technologies arise. Thus, democracy and the other EU values I described above must be considered fundamental in this endeavour.

Despite this premise, it must be said that the framework of the Lisbon Treaty appears to a certain extent to be outdated to reflect the challenges that disruptive technologies pose to EU fundamental values. In this sense, many soft law acts promoted by the EU institutions (and sometimes by the Member States) have supplemented the lack of direct reference in the Treaties to the risks and opportunities that disruptive technologies represent for the EU.¹¹

In particular, two declarations have been promoted on the compliance of digital public services with the EU values and democratic principles: the Tallinn Declaration (Ministerial Declaration on e-Government)¹² and the Berlin Declaration on Digital Society and Value-based Digital Government.¹³ These documents have been signed under the EU umbrella but do not represent EU acts. Thus, they have not been published in the Official Journal of the European Union. Although it is not *per se* a declaration, it is also worth noting that there is a specific communication by the Commission on a 'European Democracy Action Plan'.¹⁴ This action plan describes how the digital transition is changing our democracy and to which extent this change produces effects. Another

This is not to underestimate or reduce the importance that these concepts have among the values included in art. 2 TEU. Rather, it is to advocate in favor of the need for a specific approach to EU values in the Digital Single Market.

On these declaration see C. Cocito, P. De Hert 'The use of declarations by the European Commission: 'careful with that axe, Eugene', *Digital Constitutionalism* (2023) https://digi-con.org/the-use-of-declarations-by-the-european-commission-careful-with-that-axe-eugene/.

^{12 &#}x27;eGovernement Declaration', signed in Tallin on 6 October 2017. See https://digital-strategy .ec.europa.eu/en/news/ministerial-declaration-egovernment-tallinn-declaration.

^{&#}x27;Declaration on Digital Society and Value-based Digital Government', signed in Berlin on 8 December 2020.

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the European Democracy Action Plan, COM/2020/790 Final.

declaration has been promoted by the Portuguese Presidency of the Council in 2021, entitled 'Digital Democracy with a Purpose'. ¹⁵

The last in this line of declarations is the 'European Declaration on Digital Rights and Principles for the Digital Decade', promoted jointly by the Parliament, the Council, and the Commission and adopted as an interinstitutional declaration. This last declaration is perhaps the most important one, as it refers to EU values from the outset, 17 and it has an entire chapter (n. IV) devoted to democratic participation in the digital sphere.

Of course, the EU institutions and Member States' tendency to indulge in declarations instead of engaging in constructive debates around binding acts can be criticised. However, in light of the current limited framework of EU legislation mainly adopted for harmonising the EU internal market, it is unclear if much more can be done. It might even be argued that there is a lack of a more explicit legal basis in the Treaties to allow the adoption of specific acts addressed to assess compliance of disruptive technologies with democracy and EU fundamental values. For this reason, in the next paragraph, I will analyse the EU secondary law applicable to disruptive technology to understand if it can be useful to develop technology compliant with the EU's fundamental values and democratic principles.

4 EU Secondary Law

This paragraph will assess if the secondary legislation either mentions or embodies an approach that protects democracy and EU values.

4.1 Strategic Secondary Legislation on Disruptive Technologies Not Directly Mentioning Threats to EU Values and Democracy

There are certain EU legal texts that, despite their strategic importance for disruptive technologies, do not explicitly mention the potential threat to democracy and other EU fundamental values. A notable example is the e-IDAS

^{15 &#}x27;Declaration on Digital Democracy with a Purpose', signed in Lisbon on 1 June 2021.

¹⁶ European Declaration on Digital Rights and Principles for the Digital Decade, 2023/C 23/OI.

¹⁷ *Ibid.*, Recital (1), (5) and (6). Paragraphs 12–15.

¹⁸ The market harmonization goal of the EU legal instruments to regulate disruptive technologies is given by the lack of a specific legal basis, that led the Commission to propose the vast majority of these instruments under the legal basis of Art. 114 TFEU.

regulation.¹⁹ This regulation was negotiated between 2012 and 2013 and is applicable as of 2016. Still, digital identity is a key sector where the potential abuse of this technology can easily undermine the democratic process (e.g., the use of digital identity in voting procedures). Recently, the Commission proposed a recast of the regulation, but also, in the newly proposed text, there is no reference to the potential threats to democracy and EU values.²⁰

A similar approach has been followed in the key regulatory framework applicable to crypto assets, particularly in regulating the market in crypto assets (MiCA).²¹ MiCA seems not to be aware of the potential threats to democracy and EU values that can be realised through the use of crypto assets (e.g., potentially using them to create a parallel currency system). However, several exchanges have started cautiously delisting (or threatening to) stable coins and privacy coins based on compliance with the MiCA regulatory requirements, revealing that, perhaps, even without a direct reference to EU values and democracy, it is possible to pursue a similar aim.

4.2 Artificial Intelligence

The Artificial Intelligence (AI) Act is of strategic importance for the EU.²² Artificial Intelligence is one of the four technologies the Commission regarded as critical for technological development in the EU.²³ In the AI Act, there are certain references to EU values and their importance for this regulatory instrument:

In Recital (28), for instance, it is acknowledged that "Aside from the many beneficial uses of Artificial Intelligence, that technology can also be misused and provide novel and powerful tools for manipulative, exploitative and social control practices". Then, the EU legislator continues in Recital (28) regarding manipulative practices, mentioning that "Such practices are particularly

¹⁹ Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market.

²⁰ Regulation (EU) 2024/1183 of the European Parliament and of the Council of 11 April 2024 amending Regulation (EU) No 910/2014 as regards establishing the European Digital Identity Framework.

²¹ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets.

²² Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence.

²³ Commission Recommendation of 3.10.2023 on critical technology areas for the EU's economic security for further risk assessment with Member States.

harmful and should be prohibited because they contradict Union values of respect for human dignity, freedom, equality, democracy and the rule of law and Union fundamental rights, including the right to non-discrimination, data protection and privacy and the rights of the child".

Also, in Recital (61), it is acknowledged that "Certain AI systems intended for the administration of justice and democratic processes should be classified as high-risk, considering their potentially significant impact on democracy, the rule of law, individual freedoms as well as the right to an effective remedy and to a fair trial". This means that AI technologies involved in the democratic process will be regarded as 'high-risk' technologies and be subjected to the additional requirements of the AI Act.²⁴ In Annex III, where the high-risk AI systems are listed, is explicitly included: "Administration of justice and democratic processes: (a) AI systems intended to assist a judicial authority in researching and interpreting facts and the law and in applying the law to a concrete set of facts".

Also, after adopting the position in the first reading by the European Parliament, references to fundamental rights increased considerably.²⁵ In particular, reference to democracy and EU values has been reinforced in Recital (1), which now includes "fundamental rights as enshrined in the Charter of fundamental rights of the European Union (the 'Charter'), including democracy, the rule of law and environmental protection, against the harmful effects of AI systems in the Union, and to support innovation".

A new Recital (2) has also been included, which makes express reference to applying the Regulation according to democracy and fundamental rights. 26 Reference to democracy and EU values has also been added to several other recitals. 27

Article 1 of the Regulation as amended by the European Parliament also references "fundamental rights enshrined in the Charter of Fundamental Rights, including democracy, the rule of law and environmental protection". These elements have surely reinforced the role of the AI Act and its potential to avoid the use of disruptive technologies to threaten democracy and EU values in

Art. 6(2), Regulation laying down harmonised rules on artificial intelligence, cit.

²⁵ The proposal was the subject of extremely tense negotiations between the Council and the Parliament, and the text changed considerably from the Commission initiative.

Recital 2: "This Regulation should be applied in accordance with the values of the Union enshrined as in the Charter, facilitating the protection of natural persons, undertakings, democracy, the rule of law and environmental protection, while boosting innovation and employment and making the Union a leader in the uptake of trustworthy AI".

²⁷ In particular, Recitals (27) and (62).

the Digital Single Market. However, it should be remembered that the overall rationale of the Regulation, as testified by its main legal basis, is to allow the safe production and commercialisation of goods and services that use Artificial Intelligence.²⁸

4.3 Digital Platforms

The Digital Services Act package is the regulatory framework of digital platforms, composed of t Digital Services Act (DSA)²⁹ and the Digital Markets Act (DMA).³⁰ This package was proposed by the Commission to contain the power of large companies (Google, Apple, Meta, Amazon) having a considerable influence on the digital environment. However, while in the DMA (which, in nature, is eminently concerned with competition law), there is no reference to threats to democracy and EU values, and some references are still present in the DSA.

Recital (80) describes four categories of systemic risks that large platforms should evaluate.³¹ In Recital (81), it is said that "A second category concerns the actual or foreseeable impact of the service on the exercise of fundamental rights, as protected by the Charter [...]" and in Recital (82) "A third category of risks concerns the actual or foreseeable negative effects on democratic processes, civic discourse and electoral processes, as well as public security". These risks should be the subject of a specific risk-assessment procedure described in Article 34 of the DSA.³²

Also, the Freedom of Media Act is very important for preventing the threats towards democracy and EU fundamental values from digital platforms and undermining media freedom.³³ In this case, the textual choice of

²⁸ The legal basis of the Regulation is Art. 114.

²⁹ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services.

Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector.

Recital (80), Regulation (EU) 2022/2065 "Four categories of systemic risks should be assessed in-depth by the providers of very large online platforms and of very large online search engines".

³² *Ibid.* Art. 34(1): Providers of very large online platforms and of very large online search engines shall diligently identify, analyse and assess any systemic risks in the Union stemming from the design or functioning of their service and its related systems, including algorithmic systems, or from the use made of their services.

Regulation (EU) 2024/1083 of the European Parliament and of the Council of 11 April 2024 establishing a common framework for media services in the internal market.

the Commission seems to be, in the vast majority of cases, to refer directly to the respect of fundamental rights rather than, at large, to EU values and democracy.³⁴

4.4 Cybersecurity

This area, now extensively regulated at the EU level, also concerns the threats to democracy and EU values that can be produced via cyber-attacks. In Directive (EU) 2022/2555, Recital (70), it is said: "Large-scale cybersecurity incidents and crises at Union level require coordinated action to ensure a rapid and effective response because of the high degree of interdependence between sectors and Member States. The availability of cyber-resilient network and information systems and the availability, confidentiality and integrity of data are vital for the security of the Union and for the protection of its citizens, businesses and institutions against incidents and cyber threats, as well as for enhancing the trust of individuals and organisations in the Union's ability to promote and protect a global, open, free, stable and secure cyberspace grounded in human rights, fundamental freedoms, democracy and the rule of law".

In Directive (EU) 2022/2557 on the resilience of critical entities, Article 2(3) includes the potential threats to the rule of law in the classification of incidents under the Directive: "'incident' means an event which has the potential to disrupt significantly, or that disrupts, the provision of an essential service, including when it affects the national systems that safeguard the rule of law".

5 A Technology That Complies with EU Fundamental Values as an Element of EU Strategic Autonomy

The relevance of disruptive technologies for the EU legal order is particularly clear when we see the link between these technologies and the strategic autonomy of the European Union. It is important to distinguish strategic autonomy from national sovereignty or from the temptation to emancipate from globalization.³⁵ On the contrary, the strategic autonomy of the EU means that the

³⁴ Although a reference to values is present in *Ibid.*, Recital (2): [...] The Union should help the media sector seize those opportunities within the internal market, while at the same time protecting the values, such as the protection of the fundamental rights, that are common to the Union and to its Member States.

³⁵ It should be recognised that there is a certain degree of ambiguity between the notion of strategic autonomy and sovereignty in "EU fashion", at least in the interpretation given by French commentators. See, *inter alia*, Y. Bertoncini, 'Quelle "souveraineté européenne" après la déclaration de Versailles?', *Schuman Papers* n°721 (2023), https://

EU and its Member States should be able to withstand fundamental threats (like pandemics, climate change and conflicts) without necessarily resorting to external help or the support of neighbour organisations. At the moment of writing in April 2024, the EU does not have a legal instrument explicitly devoted to assessing the compliance of disruptive technologies with democracy and EU values. Classic instruments used in the context of the protection of the rule of law are also not adequate for use in this situation, as they are mainly addressed to states. Thus, they cannot be used to target the application of specific disruptive technologies. Some instruments can be re-purposed, and others are currently being developed within this scope, considering the framework of international law within which the EU is currently moving.

5.1 The Council of Europe Framework Convention on Artificial Intelligence

The Council of Europe is adopting a Framework Convention on Artificial Intelligence, Democracy and the Rule of Law. This Convention has been drafted by an *ad-hoc* Committee on Artificial Intelligence, established by the Committee of Ministers under Article 17 of the Statute of the Council of Europe. ³⁶ The final version of the text has been published on the Committee on Artificial Intelligence website and on the Council of Europe website. ³⁷ The Secretary General of the Council of Europe, Marija Pejčinović Burić, publicly declared that the Framework Convention was finalised on 15 March 2024. ³⁸

Article 13 of the Convention, among many other instruments, refers to a seemingly new principle that might effectively act as the basis for protecting democracy in the digital environment. This is the principle of 'Safe innovation' and, in its latest version, reads: "With a view to fostering innovation while avoiding adverse impacts on human rights, democracy and the rule of law, each Party is called upon to enable, as appropriate, the establishment of controlled

www.robert-schuman.eu/fr/questions-d-europe/721-quelle-souverainete-europeenne-apres-la-declaration-de-versailles.

³⁶ See Committee on Artificial Intelligence's Terms of Reference, version of 1 January 2024, https://rm.coe.int/terms-of-reference-of-the-committee-on-artificial-intelligence-cai-/1680adeoof.

³⁷ Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule Of Law, https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence.

³⁸ Statement by Marija Pejčinović Burić, 'Artificial Intelligence, Human Rights, Democracy and the Rule of Law Framework Convention'(15 March 2024) https://www.coe.int/en/web/portal/-/artificial-intelligence-human-rights-democracy-and-the-rule-of-law-framework-convention.

environments for developing, experimenting and testing artificial intelligence systems under the supervision of its competent authorities".

The EU Member States are all Parties of the Council of Europe, and the Framework Convention explicitly allows the European Union to join.³⁹ In light of that, this principle will likely display its effectiveness within EU law. It can be a valuable tool in the courts' hands to protect horizontal democracy and EU values.

5.2 The Charter of Fundamental Rights of the EU Read Together with the Declaration on European Digital Rights and Principles

Several fundamental rights protected by the Charter of Fundamental Rights can be valuable instruments to protect from abuses. ⁴⁰ The reach of the Charter on the digital environment has also been recently supplemented by a Declaration on European digital rights and principles that can be an interesting tool for interpreting the Charter and other EU instruments. ⁴¹ With this reference, paragraph 1 explicitly mentions the commitment of the Parties of the Declaration to "a) strengthening the democratic framework for a digital transformation that benefits everyone and improves the lives of all people living in the EU" and "b) taking necessary measures to ensure that the values of the EU and the rights of individuals as recognised by EU law are respected online as well as offline". Paragraph 15 also mentions the role of digital platforms in supporting the democratic debate online. ⁴²

5.3 The Fundamental Rights Impact Assessment in the Artificial Intelligence Act

Another element that can reinforce the protection of democracy and EU values is the impact assessment on fundamental rights in the Artificial Intelligence $Act.^{43}$ The fundamental rights impact assessment is detailed under Article 27

³⁹ Article 30, Framework Convention on Artificial Intelligence, cit.

See, for instance, the reference to fundamental rights in the Charter in the impact assessment of the European Commission for the proposal for a Regulation on Artificial Intelligence *cit.*, 11.

⁴¹ European Declaration on Digital Rights and Principles for the Digital Decade, cit.

⁴² Paragraph 15, European Declaration on Digital Rights and Principles for the Digital Decade, *cit.* "Online platforms, particularly very large online platforms, should support free democratic debate online".

On this see A. Mantelero, 'The Fundamental Rights Impact Assessment (fria) in the AI Act: roots, legal obligations and key elements for a model template', (2024), available at \$srn \text{https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4782126.}

of the AI Act and applies only to high AI-risk systems.⁴⁴ The impact assessment should be conducted *ex-ante*, and it provides for a series of elements to be included in it: a description of the deployer's processes and the period or frequency with which each high-risk AI system is intended to be used, the categories of natural persons and groups likely to be affected by its use, the specific risks of harm likely to have an impact on the categories of persons, a description of the implementation of human oversight measures, the measures to be taken where those risks materialise.⁴⁵ However, it is impossible to take for granted that under the label of fundamental rights are included the potential threats to democracy and other EU fundamental values. This is also because it is difficult to give a uniformly accepted definition of democracy.⁴⁶ However, before the AI act enters into force and is fully applicable (and this will not happen before 24 months from its entrance),⁴⁷ it is too early to speculate, and the situation should be assessed on a case-by-case basis.

5.4 The EU Legal Framework and the Challenges That Disruptive Technologies Pose to EU Fundamental Values and Democracy

Disruptive technologies – the Golem – undoubtedly pose several challenges to democracy in the EU legal order and, of course, beyond. Perhaps it is not by chance that cases of interference of technology and media in democratic life are becoming more and more evident. Without evoking the Cambridge Analytica case and its consequences, in the United Kingdom, which relatively recently left the bloc, an authoritative media outlet found a link between a famous social media platform and riots in specific areas of London. As Also, among many other episodes, recently, a very influential technology tycoon, Elon Musk, relaunched (with a comment) a tweet by an Italian account known to spread fake news (yet it has more than 300k followers on Twitter/X).

With the exceptions mentioned above, the EU regulatory framework seems still unprepared to target the threats that can emerge from the exponential emersion of information that can manipulate the democratic environment. The examples of the declarations and communications with the Commission

⁴⁴ Art. 6, Regulation laying down harmonised rules on artificial intelligence, cit.

⁴⁵ *Ibid.* Art. 27.1 (a) to (f).

⁴⁶ See A. Mantelero, cit., 22.

⁴⁷ Art. 113, Regulation laying down harmonised rules on artificial intelligence, cit.

⁴⁸ BBC, 'Inside Tiktok's real-life frenzies – from riots to false murder accusations' (20 September 2023), https://www.bbc.com/news/technology-66719572.

⁴⁹ Open Online, 'Sulle Ong e i salvataggi in mare Elon Musk ha dato risalto al bufalaro Radio Genoa' (20 September 2023) https://www.open.online/2023/09/29/ong-elon-musk-radio -genoa-fake-news-fc/. [available in Italian only]

and the Member States, as well as the reference to democracy and the rule of law included in the latest version of the AI Act, are commendable but still have very little practical value. Also, one can wonder to which extent any regulatory power (or even superpower, as Anu Bradford recently noted in her last book) 50 can have the ambition to limit the reach and influence of disruptive technologies with the sole help of the regulatory weapon. It should also be considered that, in the lack of an overarching legal framework, the digital powers might consider to self-regulate themselves, which is already happening to a certain extent. 51

In light of the preliminary analysis conducted in this paper, it can be said that the resilience of the EU legal order to specific threats targeting democracy and EU fundamental values via disruptive technologies remains low. There is a persistent need to find solutions that allow the EU and national authorities to have better control of the digital space while at the same time protecting freedom of expression and association. This balance seems extremely difficult to attain, but this challenge needs to be faced.

6 Conclusion

There are a series of recommendations that can help make the EU primary and secondary framework more resilient to the challenges posed by the Golem of disruptive technologies.

The first is to foster interdisciplinarity. This implies the support of the dissemination of EU law and national constitutional law to categories that are involved in the development of the digital economy (as IT engineers) while, at the same time, disseminating among lawyers, judges and policymakers the relevant technical knowledge. This should mitigate the gap between technology and the law and policy environment. This solution, however, is perhaps too naïve and requires considerable time to be realised.

A second set of solutions is a potential Treaty change (including the EU Charter of Fundamental Rights), the unicorn of the law and policy debate at the EU level. All the actors involved are eager to evoke Treaty change, but no one wants to sit at the table and discuss this. At the same time, the Treaty change is being postponed to prioritise the accession of new members. Thus, the digital sphere seems likely to be left to secondary law.

⁵⁰ A. Bradford, Digital Empires: The Global Battle to Regulate Technology (2023).

⁵¹ See the notorious case of the Meta Oversight Board, https://www.oversightboard.com/.

A third potential solution is to promote self-regulation, following the model of several digital platforms.⁵² However, although useful, self-regulation does not guarantee compliance with the benchmark of the physical legal orders and could eventually facilitate the establishment of autonomous protection standards.

The last solution is to develop *ad-hoc* regulatory tools to promote compliance of disruptive technologies with democracy and EU fundamental values.⁵³ These regulatory tools – a first example might be the Council of Europe Framework Convention on Artificial Intelligence and human rights, democracy and the rule of law – should be guided by the set of values in EU primary law, as amended and enriched by the many declarations that intervened in the last few years, including the European Declaration on Digital Rights and Principles and the European Pillar on Social Rights. The downside of this approach is that it goes on top of the already existing impressive body of legislation on technology. It will likely take several years to be negotiated and implemented while potentially being received by the digital industry as problematic.

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