EUPLANT Working Paper Series
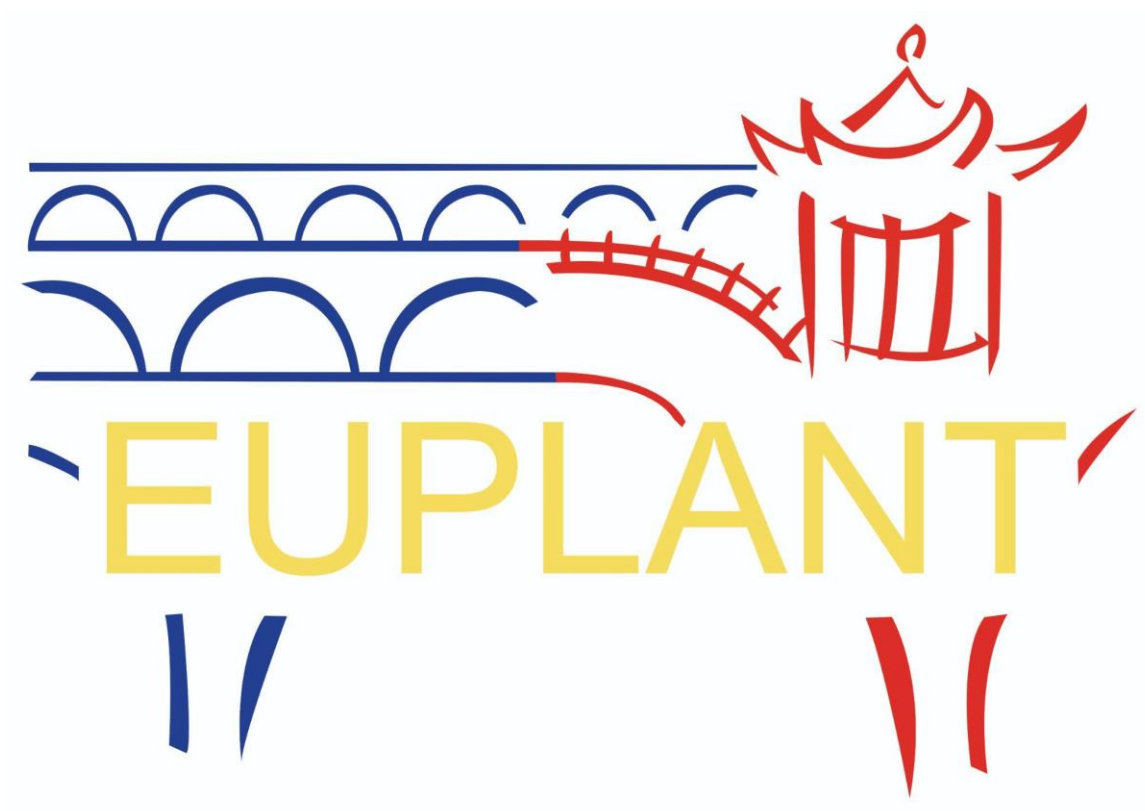# 1/2021

The A.I. Global Order:
What Place for the European Union?

Matthieu Burnay and Alexandru Circiumaru
Queen Mary University of London

The A.I. Global Order - What Place for the European Union?[1]
Matthieu Burnay[2] and Alexandru Circiumaru[3]

Abstract

We now live in the age of Artificial Intelligence (AI). While this claim is definitely not new, it is nowadays easier to identify the impact of AI upon our daily lives, ranging from rather innocuous applications such as navigation systems or web searches to some that can have negative impacts on individual rights when AI is used for surveillance purposes (Buiten 2019, Sales 2020). As a result, we can refer to the emergence of a complex and multi-level "AI Global Order", in which a variety of (public and private) stakeholders are competing for technological and regulatory leadership. For now, in pole position seem to be the United States and China with its already established goal to be 'leading the world in new trends in [AI] development" by 2030 (State Council 2017).

The chapter considers the European Union's (EU) position within this AI Global Order with reference to its Digital Strategy (February 2020) and White Paper on AI (February 2020). It focuses on the EU's commitment to take a leadership position through regulatory activism and ensure that its values and principles are successfully internationalised through collaborations in the area of AI.

The first part of this Chapter will look at the ways in which the EU has positioned itself through its regulatory activism, in comparison with the United States and China and where it stands in terms of technological developments in the area of AI. It will then asses the strength of its position to transform its values and rules on AI into a global rule book taking due account of the challenges the EU is facing in terms of both internal/external and external/external coherence (Pech 2018, Raube, Burnay 2018).The second part discusses the prospects and challenges for the EU to recognise China as a 'likeminded' global player in the field of AI. It will here shed light on the conceptual, normative, and policy gaps that still characterise the relationship between China and the EU on AI from the perspectives of human rights, algorithmic citizenship, and right to privacy and data protection. The chapter

---

[2] Matthieu Burnay is Senior Lecturer in Global Law and Coordinator of the Jean Monnet Network EUPLANT at Queen Mary University of London.
[3] Alexandru Circiumaru is Research Assistant for the Jean Monnet Network EUPLANT at Queen Mary University of London and an MPhil in Law Candidate at the University of Oxford.

concludes that, despite many similarities related to broad, lofty objectives such as that AI should be 'human-centered', it is clear that current developments in the governance of AI will most likely lead to a severe fragmentation of the AI Global Order in which the EU might not have the role it is hoping for.

Introduction

More than living through a technological revolution, we already live in the age of Artificial Intelligence (AI) (Scherer 2016). While this idea is not new, it is easier than ever before to account for the concrete manifestations and impact of AI on our contemporary societies, ranging from rather innocuous applications such as navigation systems and online translation services to those that can have serious consequences for individual rights such as the use of facial recognition for policing purposes (BBC 2020), risks assessment instruments in criminal justice (Gless 2020), and intelligent systems and big data for dispute resolution (Lozada-Pimineto 2019).

Against this background, the focus of the response of global players in the face of this technology has been two-fold: (1) capitalising on it and (2) regulating it. While the ways in which both state and non-state actors can capitalise on this technology are relatively straightforward, the same cannot be said about regulation. In fact, the rapid pace of AI technology development along with the difficulties inherent to imposing liability for decisions reached by algorithms all make it difficult to use the traditional governance toolbox (Scherer 2016). Most of the specialised literature on AI published so far focuses on these points (See, for example, Buiten 2019) as well on how AI will impact other areas of law such as consumer or competition law (Ezrachi, Stucke 2019). The transnational nature of AI development and its implications also call for international cooperation as well as the involvement of non-state actors (Ala-Pietilä, Smuha 2021). It is in recognition of the transnational nature of AI that a number of states (i.e. United Kingdom, the US, Canada, Japan, and the EU) launched the Global Partnership on Artificial Intelligence in June 2020 to support 'the responsible and human-centric development and use of AI in a manner consistent with human rights, fundamental freedoms and [...]democratic values" (Global Partnership on Artificial Intelligence 2020.

Despite recent attempts to coordinate, state and non-state actors alike have come up with their own agendas on AI, all putting a relative emphasis on its development and regulation aspects. China and the United States of America (US) have primarily focused on capitalising on AI, the former announcing as early as 2017 its intention 'to lead the world in new trends in the development of AI' (Creemers et. Al. 2017, p.28) while the latter expressed its commitment to "maintain American leadership on AI".[4] On the other hand, the European Union ('EU') has attempted to project its normative identity by establishing itself as a leader of 'ethical AI' (Renda 2020), being the first to put forward a proposal on the regulation of Artificial Intelligence, in April 2021.[5] While the EU is the only one so far to have put together a legislative proposal in this area, all the actors listed above have interestingly come up with ethical guidelines for the development and deployment of AI, therefore recognising its risks and taking a more holistic approach to it.

---

[4] The White House, Executive Order on Maintaining American Leadership in Artificial Intelligence, <https://www.whitehouse.gov/presidential-actions/executive-order-maintaining-american-leadership-artificial-intelligence/> Accessed 1 November 2020.
[5] Proposal for a Regulation Of The European Parliament And Of The Council Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, Brussels, 21.4.2021 Com(2021) 206 Final

In light of the above, one can certainly speak of the emergence of a complex, multi-level AI global order, currently defined by an ongoing race for both technological and regulatory leadership. This chapter considers the EU's position in the AI global order with reference to its Digital Strategy[6], White Paper on Artificial Intelligence (AIWP)[7] and finally the Artificial Intelligence Act Proposal ('AIA').[8] It focuses on the EU countries' commitment to take a leadership position through regulatory activism and ensure that its values and principles are successfully internationalised through collaborations in the area of AI. It interrogates the extent to which one can identify a 'Brussels effect' currently in the making the governance of AI by focusing on the specific case of EU-China cooperation on AI (Bradford 2020).

In its first part, this chapter looks more closely at the emerging AI global order and its defining characteristics by considering the way in which the EU has positioned itself through its regulatory activism and technological development, using China and the US as comparators. It then assesses the viability of EU plans to transform its values and rules into a 'global rule book' on AI. The second part discusses the prospects and challenges for the EU to recognise China as a 'like minded' partner in the field of AI, shedding light on the conceptual, normative, and policy gaps that still characterise the relationship between EU and China, from the perspective of human rights, algorithmic citizenship, and right to privacy and data protection. The chapter concludes that, despite many similarities related to broad, lofty objectives such as that AI should be 'human-centered', it is clear that current developments in the governance of AI will most likely lead to a severe fragmentation of the AI global order in which the EU might not have the role it is hoping for.

A European-minded AI Global Order?

Living in the age of AI is no longer a sci-fi premise or vision for the future (Erdélyi, Goldsmith 2018) but a reality that all of us are experiencing, albeit to different degrees. In the last four years various stakeholders, importantly not only national or supranational institutions but also, following a wider trend (Abott, Snidal 2009), corporate actors (Moore 2016) and Civil Society Organisations (CSOs) have outlined their vision for how AI should be developed and deployed. Corporations, in particular those who play an important role in the development of this technology, have taken a proactive stance, either by drafting their own guiding principles on AI, for example Google and Microsoft,[9] or by participating in the process of drafting national-level principles, as it is the case for Alibaba and

---

[6] European Commission, "Shaping Europe's Digital Future", <https://ec.europa.eu/info/sites/info/files/communication-shaping-europes-digital-future-feb2020_en_4.pdf> acessed 1 November 2020.

[7] European Commission, "White Paper - On Artificial Intelligence - A European approach to excellence and trust", COM(2020) 65 final.

[8] Proposal for a Regulation Of The European Parliament And Of The Council Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, Brussels, 21.4.2021 Com(2021) 206 Final

[9] "Artificial Intelligence at Google: Our Principles" <https://ai.google/principles/> and "Microsoft AI principles", <https://www.microsoft.com/en-us/ai/responsible-ai?activetab=pivot1%3aprimaryr6>.

Baidu[10] in China. This signals the move of big tech from lobbying to actually being a part of the policy making process, influencing the opinion of the general public as well. One example of how this is done is the release of ethical guidelines by various tech companies, which are then used by policymakers. One concrete example is that of Microsoft who offered its own ethical principles as feedback for the Commission's consultation on a legislative proposal on AI.[11] CSOs are adopting a new approach too, seeking to play a more important part in regulatory processes. A notable example is The Toronto Declaration, signed by a coalition of NGOs, which calls for the protection of the rights to equality and non-discrimination in machine learning systems.[12]

At the EU level, the first institution that drew attention to the need for developing a set of principles guiding the development of AI was the European Parliament, in a Resolution from 2017[13] concerning civil law rules for robotics and AI. In this Resolution, the Parliament recommended to the Commission, among others, the creation of an EU agency dedicated to robotics and AI. In 2018, the baton was passed to the European Commission ('the Commission') which released its "Communication on AI"[14] in which it calls for a unitary approach of all EU Member States (EUMS) on this technology - with the EUMS signing the Coordinated Plan on AI[15] the same year - and which assembled, through an open call, the High Level Expert Group on Artificial Intelligence (AIHLEG),[16] made up of 52 representatives from academia, civil society and industry. The AIHLEG went on to prepare two deliverables the Ethics Guidelines for Trustworthy AI[17] ('the Ethics Guidelines') and the Policy and Investment Recommendations for Trustworthy AI,[18] both of which contain recommendations for potential policy changes. The year 2019 marked the European Parliament elections and a new Commission. The then President Elect noted in her Agenda for

---

[10] Alibaba, Baidu and Tenecent have all been involved in drafting the Beijing AI Principles. See also the speech of Baidu's CEO during the 13th Chinese People's Political Consultative Conference (CPPCC) National Committee, in which he stressed the need for ethical principles for AI - http://www.xinhuanet.com/english/2019-03/10/c_137883996.htm

[11] See, for example, the response provided by Microsoft to the European Commission's public consultation on AI - ethical and legal requirements, available here: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12527-Requirements-for-Artificial-Intelligence/F551021

[12] https://www.torontodeclaration.org/

[13] European Parliament Resolution of 16 February 2017 With Recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL))

[14] European Commission communication, "AI for Europe", COM (2018) 237 final

[15] Stupp C, "Twenty-four EU countries sign artificial intelligence pact in bid to compete with US and China" (Euractiv April 2018) <https://www.euractiv.com/section/digital/news/twenty-four-eu-countries-sign-artificial-intelligence-pact-in-bid-to-compete-with-us-china/> accessed 1 November 2020.

[16] European Commission, "High-Level Expert Group on Artificial Intelligence", <https://ec.europa.eu/digital-single-market/en/high-level-expert-group-artificial-intelligence>.

[17] High-Level Expert Group on Artificial Intelligence, "Ethics Guidelines For Trustworthy AI", 8 April 2019 <https://ec.europa.eu/futurium/en/ai-alliance-consultation.>

[18] High-Level Expert Group on Artificial Intelligence, "Policy and Investment Recommendations For Trustworthy AI", <https://ec.europa.eu/digital-single-market/en/news/policy-and-investment-recommendations-trustworthy-artificial-intelligence.>

Europe that AI is a technology that is "changing the world at an unprecedented speed",[19] promising to deliver a legislative proposal on AI in the first one hundred days of her mandate,[20] reaffirming EU's bid to lead the world in 'ethical AI'.[21]

Once confirmed, the new Commission included a newly created portfolio, "A Europe fit for the Digital Age". In charge of this portfolio, which other than coordinating EU's work on AI also leads the work for creating Europe's Digital Decade[22], was named the Competition Commissioner Margarethe Vestager. In 2020 alone, her cabinet has overseen the release of a new Cybersecurity Policy, the Digital Services Act and the Digital Markets Act, both directed at the way in which digital platforms operate and the Data Governance Act, meant to ensure a freedom of movement for non-personal data which can be used to develop AI.

The bid to lead the world in 'ethical AI' was, however, off to a rocky start, the promised legislative proposal being turned instead into the White Paper on AI (AIWP) (Kayser-Bril 2020). The AIWP, which is part of the broader digital strategy (Brattberg 2020) presented in February 2020, aims to provide a rough yet indicative sketch of the approach the EU will take in putting together the promised legislation and give a chance to relevant stakeholders to express their opinion.[23] It is worth mentioning that the AIWP, which is based to a great extent on the Ethics Guidelines and Policy and Investment Recommendations, has elicited numerous reactions, not all of which have been positive, with claims that EU's emerging strategy will have a negative impact on start-ups, lacks real enforcement mechanisms and is less bold and ambitious than initially anticipated (Cath-Speth and Kaltheuner 2020).

Section H of the AIWP, dealing with the external dimension of the EU's proposed AI policy, clearly highlights what could be EU's contribution to the emergence of an AI global order. Three points are particularly worthy of attention: (1) The Commission argues that the EU is well placed to play a leadership role in building alliances around shared values and promote the ethical use of AI; (2) The EU intends to continue collaborating with like-minded countries and other global players on AI following an approach rooted in its rules and values; (3) The Commission emphasises that international cooperation on AI *must* [emphasis added] be based on an approach that promotes the respect of fundamental rights, including human dignity, pluralism, inclusion, non-discrimination and protection of privacy and personal data and very clearly expresses its intention to export its values across the world. In terms of development and investment, the story is different. The

---

[19] Ursula von der Leyen, "A Union that strives for more, My Agenda for Europe: political guidelines for the next European Commission 2019-2024", <https://op.europa.eu/en/publication-detail/-/publication/43a17056-ebf1-11e9-9c4e-01aa75ed71a1>.

[20] Ibid. p.13.

[21] This goal can be traced back to the Coordinated Plan on the Development and Use of Artificial Intelligence Made in Europe – 2018, which states that overall, 'the ambition is for Europe to become the world-leading region for developing and deploying cutting-edge, ethical and secure AI, promoting a human-centric approach in the global context.'

[22] State of the Union 2020 - President von der Leyen's speech, available at: https://ec.europa.eu/info/strategy/strategic-planning/state-union-addresses/state-union-2020_en

[23] After the release of the AIWP the Commission started a consultation period during which it invites a number of stakeholders, including civil society organisations, academics and citizens, to respond to a questionnaire - <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12270-White-Paper-on-Artificial-Intelligence-a-European-Approach/public-consultation>.

differences in investments in AI have been highlighted by the Commission itself, in its Communication on AI, where it presented the levels of investment in AI, in 2016, as being around EUR 2.4-3.2 billion in Europe, compared with EUR 6.5-9.7 billion in Asia and EUR 12.1-18.6 billion in North America.[24] The Commission used these numbers then to encourage further investment on AI (Sullivan 2018); they remain telling for the purpose of analysing EU's position within the AI global order.

Building upon this foundation, the Commission has released, on the 21st of April 2021, the proposal for the AIA, which draws heavily upon the AIWP and the work of the AI-HLEG and suggests a risk-based approach to AI. One of the declared goals of the Commission in putting forward this proposal is to make the EU the leader in regulating AI. The Proposal is already discussed by the Parliament and the most optimist predictions see a final version being adopted in late 2022.

By contrast, China has been focused, since the 'New Generation Artificial Intelligence Development Plan' (Creemers 2017), on being the world leader in AI-development. While feasibility of this goal has been called into question, China has certainly been very active in creating national champions on AI, each tasked with the development of a different branch. For example Baidu has been tasked with the development of autonomous driving, Alibaba with the development of smart cities, and Tencent with medical diagnoses. As highlighted by R. Creemers, China's plan to lead in the domain of AI aims to serve both the domestic and foreign policy agenda of the Party-State (Creemers 2017). At the domestic level, leadership is to support the creation of new social management and governance instruments. At the international level, it can constitute as a strong driver of the export of Chinese technologies and contribution to the global governance of cyberspace. From an economic point of view, the large-scale investments in AI and innovative technologies should be seen as an important vehicle to avoid the middle-income trap: For China, 'the greatest immediate need is to create, absorb, and disseminate the new technologies required to increase the productivity of China's capital stock' (Jiang 2020). China has also engaged in drafting its own principles on AI, with help from its tech giants and researchers, calling the final set "the Beijing AI Principles".[25] These principles cover the research, development, use, and governance of AI and call for 'its healthy development to support the construction of a community of common destiny, and the realization of beneficial AI for mankind and nature' (Ibid.).

While both the EU and China have ambitious visions for their work on AI, the US remains the global leader in the field, not least thanks to the work of tech giants such as Google, IBM and Microsoft as well as the vivacity of the start-ups ecosystem present in the Silicon Valley (Antonov, Kerikmäe 2020). On regulation, the US seems to be taking a light-touch approach to ensure innovation is not hampered, as explained in a presidential order from 2019 'Maintaining American Leadership in Artificial Intelligence'. [26] The title is very telling of the US' approach and its conflict with those of

---

[24] European Commission, Communication, "AI for Europe", COM (2018) 237 final.

[25] The Beijing AI Principles <https://www.baai.ac.cn/news/beijing-ai-principles-en.html#:~:text=For%20Humanity%3A%20The%20R%26D%20of,utilize%20or%20harm%20human%20beings>

[26] The White House, Executive Order on Maintaining American Leadership in Artificial Intelligence, <https://www.whitehouse.gov/presidential-actions/executive-order-maintaining-american-leadership-artificial-intelligence/> Accessed 1 November 2020.

both China and the EU. The Presidential Order identifies five principles[27] that will guide the American strategy on AI, the second of which, 'developing appropriate technical standards and reduce barriers to the safe testing and deployment of AI', is in stark difference to EU's vision. It also serves as a call to action, establishing six strategic objectives, recognising that AI will impact the work of all executive department and agencies, and calling upon some of them to take action, for example by considering methods of improving the quality, usability, and appropriate access to priority data identified by the AI research community, within 180 days from the moment when this order was published. In 2020, this Presidential Order was followed-up by a list of binding principles that must be taken into account by agency regulators.[28] A comprehensive legislation on the matter does not appear to be on the horizon, especially in light of the approach outlined above.

It is this US' advantage combined with China's ambitious vision that led commentators to suggest that the race of AI development is a two-horse race in which the EU does not take part (Minsky 2018). The EU finds itself in the position of trying to catch up with both China and the US in both investment and AI development, without, however, benefitting from some of their key assets, such as access to large amounts of data in China's case or the start-up environment in the US.[29] In contrast with this position, the EU attempts to establish its leadership position in regulating AI,[30] therefore finding itself in a good but arguably difficult to maintain position within the AI global order. What comes next is the process of turning this relatively ambitious AIWP into a legislative proposal that both the Council and the European Parliament can pass (Boranbay-Akan et. al. 2017). This could be a lengthy and difficult process not least in view of what appear to be the different national strategies on AI released so far by EUMS.[31] For example, the General Data Protection Regulation ('GDPR') took over four years.[32] While this is by no means a perfect term of comparison, especially

---

[27] The five principles are 1. Driving technological breakthroughs in AI; 2. Driving development of technical standards and reducing barriers to the safe testing and deployment of AI technologies; 3. Training current and future generations of workers to develop and apply AI technologies; 4. Fostering public trust and confidence in AI technologies and protect civil liberties, privacy, and American values in their application and 5. Promoting an international environment that supports American AI research and innovation and opens markets for American AI industries.

[28] The White House, Guidance for Regulation of Artificial Intelligence Applications, <https://www.whitehouse.gov/wp-content/uploads/2020/01/Draft-OMB-Memo-on-Regulation-of-AI-1-7-19.pdf>

[29] This was also suggested by Commissioner Vestager during her hearing in the European Parliament when she argued that "And some say that the Chinese have all the data and the Americans have all the money. But when I see what we have going for us in Europe, it's that we have purpose", Hearing of Margarethe Vestager, European Parliament, Verbatim Report <https://www.europarl.europa.eu/resources/library/media/20191009RES63801/20191009RES63801.pdf>

[30] As mentioned above, this goal can be traced back, to some extent, to 2018.

[31] OECD, AI Initiatives Worldwide <https://www.oecd.org/going-digital/ai/initiatives-worldwide/> and The Future of Life Institute, National and International AI Strategies <https://futureoflife.org/national-international-ai-strategies/.>

[32] European Data Protection Supervisor, The History of the General Data Protection Regulation, <https://edps.europa.eu/data-protection/data-protection/legislation/history-general-data-protection-regulation_en#>

since a data protection directive was already in place,[33] it could be informative of the timeframe that can be expected.

The New Global Order and Cooperation - The case of EU-China Relations

There is yet another dimension to this complex emergent global order - cooperation. In the case of a technology such as AI, which has no respect for national boundaries and can have very serious transnational implications regardless of the place where it is deployed, cooperation is not only desirable but necessary (Ala-Pietilä, Smuha, 2021). The AIWP suggests that the EU is hoping to play a leadership role here too and, indeed, it seems to have taken steps in this direction, being a founding member of The Global Partnership on Artificial Intelligence. However, as discussed above, the AIWP draws a distinction between the collaborations the EU envisages on AI - with 'like-minded countries', such as the other founding members of The Global Partnership on Artificial Intelligence, and with 'other global players'. At this stage, it remains difficult to establish which states, other than the ones mentioned above, will fall in either category. The main challenge comes from the fact that key players in the AI global order seem to agree on a number of broad and vague objectives such as 'AI should be used for good'[34] that is to say, to help rather than harm humanity. Such ethical principles are typically ill-defined and it remains often unclear how they can be translated into effective policies (van Wynsberghe , 2020) rather than 'ethical washing'(Yeung et. al. 2020). Such lofty goals are also pursued by the Beijing Principles,[35] fifteen in total and divided into three categories – Research, Use and Governance. One can find numerous similarities between them and the Ethics Guidelines, both in terms of the objectives pursued and the language used. Similar to the Ethics Guidelines, the Beijing Principles also talk about the need for ethical AI, which is kept under control and used for the overall benefit of all human beings. If the analysis were to stop at this rather superficial level, one could reasonably assume that China falls within the "like-minded" category.

Going beyond the surface however seriously challenges this assumption, China's status as a like-minded country being seemingly impossible as, in practice, conceptual, normative, and policy gaps still characterise its relationship with the EU on AI. Discussions are taking place though as the 2019 EU-China Legal Affairs Dialogue focused, for instance, on AI and the legal and ethical challenges that do derive from it.[36]

---

[33] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data

[34] See the first principle in the Beijing AI Principles 'Do Good' and 'Societal and environmental wellbeing' as a requirement for Trustworthy AI.

[35] The Beijing Principles were released by a multistakeholder coalition including the Beijing Academy of Artificial Intelligence (BAAI), Peking University, Tsinghua University, Institute of Automation and Institute of Computing Technology in Chinese Academy of Sciences, and an AI industrial league involving firms like Baidu, Alibaba and Tencent in May 2019.

[36] European External Action Service, 2019 EU-China Legal Affairs Dialogue, Press Release <https://eeas.europa.eu/delegations/china_en/60070/2019%20EU-CHINA%20LEGAL%20AFFAIRS%20DIALOGUE.>

The first and perhaps most important difference between the EU and Chinese approach to AI relates to their different views on human rights and how they relate to AI. While it is clear that the relevance of AI for human rights is still an emerging field (Livingston, Risse 2019), it has now become clear that a number of human rights can be impacted by the increasing reliance on algorithmic systems. According to the Committee of Ministers of the Council of Europe, these include both civil and political rights as well as economic, social, and cultural rights.[37]

The Commission's approach in the AIA is heavily based on and inspired by the protection of fundamental rights. This is evident from the way in which the categories of risk have been defined, from no/minimal risk to unacceptable risks, covered in Article 5 (with biometric surveillance and social scoring as examples), to the way in which the list of high-risk systems can be expanded, with reference to the potential negative impact of a system on fundamental rights (Article 6). The proposal therefore confirms and brings together the ideas that underlined the previous documents, such as the Ethics Guidelines and the AIWP, both of which called for an approach deeply rooted in fundamental rights protection. Consequently, the AIA proposal confirms the position taken in the AIWP, namely that the EU will seek international collaboration in line with its own vision and values. This approach very much fits with the centrality of human rights in the EU's normative identity as projected by the Lisbon Treaty (See Wouters 2020).

In their last joint communication on China to the European Council, the European Commission and High Representative for Foreign Affairs and Security Policy ('the joint communication') emphasised cooperation with China in the area of human rights acts as a 'measure of the quality of the bilateral relationship'.[38] The EU's normative policy vis-a-vis China nevertheless suffers from a lack of both internal and external coherence thereby impeding the legitimacy and effectiveness of the EU's external action vis-a-vis China (Raube and Burnay 2018). Issues pertaining to internal coherence - that is the EU's ability to consolidate its own values at home - have negatively impacted the legitimacy and effectiveness of the EU's value promotion to China (Lai, 2019). The best example thereof relates for instance to the human rights implications of illiberal policies that have been adopted by a number of EU Member States (i.e. Hungary and Poland) in recent years (See, for example, Pech and Scheppele, 2017). With these 'rule of law crises' it is the very normative foundations of the EU that are now being put under threat. Issues of external coherence - that is the ability of the EU to promote its values across all EU foreign policies - have also negatively impacted the legitimacy effectiveness of the EU's value promotion to China. In a study published by the European Think-tank Network on China, it was highlighted that 'European countries differ to a large degree in the scope of their political action when dealing with issues of human rights with China' (Rühlig 2018). At multilateral level, these differences have been translated into a growing difficulty for the EU to speak with one voice in its critique against China's human rights violations in the framework of the UN Human Rights Council.[39] Even more fundamentally, the gap between

---

[37] Council of Europe, Recommendation of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems, CM/Rec(2020)1, 8 April 2020.

[38] European Commission and HR/VP contribution to the European Council, EU-China – A Strategic Outlook, <https://ec.europa.eu/commission/sites/beta-political/files/communication-eu-china-a-strategic-outlook.pdf>.

[39] See for instance the Greek veto against an EU Resolution criticising China's human rights records in 2017. Robin Emmott and Angeliki Koutantou, 'Greece Blocks EU Statement on China Human

the European and Chinese perspectives on human rights has kept widening in recent years. Not only are values promoted by the EU 'dead on arrival' when promoted in the relationship with China (Mattlin 2012), China also increasingly assumes a 'leadership role' in shaking the procedures, institutions, and norms at the heart of the global human rights regime (Chen 2019, p.1197). This has led the EU to present China as a 'systemic rival promoting alternative models of governance' in the joint communication.[40]

The second important difference pertains to different views on algorithmic citizenship, in general, and AI-enabled mass scoring of individuals in particular. Building upon the success of private sector-operated predictive algorithms and scoring systems, a number of governments now make use of AI enabled technologies across a large range of policy fields (Dumbrava 2019). In general, AI can help governments process a large amount of data therefore making policies more targeted to the needs of end users. The use of AI for governance purposes is however not without significant risks, in particular when it takes place in the absence of the right checks and balances mechanisms. Endorsing a quite dystopian perspective, McCarthy-Jones argues in that sense '[A] government armed with AI could claim to know what its people truly want and what will really make them happy. At best it will use this to justify paternalism, at worst, totalitarianism (2020).

In China, as early as 2014, the State Council issued the Planning Outline for the Construction of a Social Credit System (2014-2020) (SCS).[41] According to this document, the Social Credit System, to be completed by 2020, constitutes an 'important component part of the Socialist market economy system and the social governance system' and should help secure a culture of 'sincerity and trustworthiness'.[42] Far from the Orwellian integrated system that has sometimes been described in the press,[43] the SCS is rather to be seen as 'an entire ecology of fragmented initiatives' taking place at both the local and corporate levels (Creemers 2018). The whole model (or rather models) of China's SCS is based on the vague concept of 'trust' thereby enabling arbitrary and disproportionate punishments to be applied (Chen et. al. 2018, p.1).

Against the background of China's authoritarian system, the SCS aims to contribute to the creation of a new *Tianxia* and 'align Chinese citizens with the ideology of the Chinese Communist Party (CCP) and to punish deviants and other destabilizing elements' (Devereaux, Peng, 2020, p.383). Digital transformation comes here to the service of a more general trend of 'moralizing governance' under Xi Jinping, characterised by an 'amalgamation of law and Socialist Core Values' (Lin and Trevaskes 2019, p.46). Interestingly, and as a side note, research has demonstrated the 'high degree of approval' of existing SCSs among the Chinese population: social rating is, in fact,

Rights at U.N.', (Reuters, 2017) < https://www.reuters.com/article/us-eu-un-rights-idUSKBN1990FP> accessed 1 November 2020

[40] European Commission and HR/VP contribution to the European Council, EU-China – A Strategic Outlook, 12 March 2019, P.1, available at https://ec.europa.eu/commission/sites/beta-political/files/communication-eu-china-a-strategic-outlook.pdf.

[41] State Council Notice concerning Issuance of the Planning Outline for the Construction of a Social Credit System (2014-2020).

[42] Ibid.

[43] See for instance: Mosher S,'China's New 'Social Credit system' is a Dystopian Nightmare', New York Post, 18 May 2019,<https://nypost.com/2019/05/18/chinas-new-social-credit-system-turns-orwells-1984-into-reality/.>, accessed 1 November 2020.

considered primarily as beneficial for the socialist market economy more than a threat to privacy (Kostka 2019, p.1565). More than providing a 'counter-model' of social rating, the Chinese experience calls for a broader reflection on a more global trend that is a rising emphasis on quantification and reputation (Sithigh and Siems 2019, p.1070).

The fear is clearly that innovations and developments in the area of AI in China can only reinforce what is already described as a 'surveillance state'. For the concept of 'surveillance state', we use in this paper the definition provided by Ball and Wood: 'a society which is organised and structured using surveillance based techniques' (Ball and Wood 2006). While state surveillance is clearly not a novel phenomenon, it is nevertheless obvious that technology-enabled surveillance explains now why debates on this topic have now become so vivid (Van Der Meulen and Heynen 2019, p.3).

Against this background, China is now increasingly categorised as a surveillance state. Internally, the Party State has intensified its efforts to use digital transformation along with the development of AI technologies as tools of control and even sometimes repression (Qiang 2019, p.53). In Xinjiang in particular, the Party State has deployed an 'unprecedented surveillance assemblage' to enhance control over the Uighurs and other minority ethnic groups (Leibold 2020, p.46). Externally, China is now heavily involved in exporting some of its surveillance technologies to a number of illiberal and authoritarian regimes around the world (Feldstein 2019, p.41), which *de facto* offers Beijing an access to foreign security and communication regimes (Harsano 2020). Under the label of 'Safe Cities', Huawei has now provided surveillance solutions to as many as 52 countries (with most of them located in Asia and Africa) (Hillman and McCalpin 2019). In sharp contrast with these developments in China, the Policy and Investment Recommendations for Trustworthy Artificial Intelligence set a ban on 'AI-enabled mass scale scoring of individuals' set by .[44] In the same way, the European Commission is now considering again introducing legislation that would regulate the use of facial recognition within the EU, after initially backtracking on this idea in the AIWP (Stolton 2020).

A key issue seems to underpin the challenges listed above, that is a very different perspective on the right to privacy and data protection. As AI needs large amounts of data in order to be effective, data will become more and more of a currency, at the price of privacy. A stricter enforcement of privacy rules can therefore lead to less data and less effective AI systems. More than a decade ago, Ess warned it would be 'both mistaken and dangerous' to believe 'privacy' in Asian contexts would be a simple translation of Western notions (2005, p.5). In the EU, both the right to privacy and data protection are protected by the EU Charter of Fundamental Rights (Arts. 7 and 8) and have been further defined by the case law of the Court of Justice of the European Union (CJEU). It is hence very much a rights-based approach that is endorsed by the EU in the protection of privacy and data protection. We are very far from that level of protection in China. In the Chinese context, both notions are clearly seen as secondary in a context where cyber-governance remains very much state-centered and informed by a search for national security protection and social stability (Lee 2018, p.58). From a private law perspective furthermore, the recognition of personality

---

[44] High-Level Expert Group on Artificial Intelligence, "Policy and Investment Recommendations For Trustworthy AI", 26 June 2019, <https://ec.europa.eu/digital-single-market/en/news/policy-and-investment-recommendations-trustworthy-artificial-intelligence.>

rights has arguably constituted 'the most controversial issue in Chinese civil law' in recent years (Chen 2018, p.103).

These normative differences explain to a large extent why data transfer between the EU and China remains far from an easy process. In a report submitted to the European Parliament Committee on Civil Liberties, Justice, and Home Affairs, De Hert and Papakonstantinou highlighted that '[I]f a legalistic approach was adopted, then no common grounds could be found between two fundamentally different systems both in their wording and in their raison d'être' (2015). Both EU law and the interpretation thereof have nevertheless evolved significantly ever since the release of that report. The CJEU now imposes a very high threshold when assessing whether a third jurisdiction offers an adequate level of data protection in line with Art. 45 GDPR. In disputes over the transfer of data to the United States, the CJEU made it clear in *Schrems I* and *Schrems II*[45] that a legalistic approach is necessary to establish whether a third country offers an adequate level of data protection or not for the transfer of data.[46] This adequate level of protection is not only defined by the existence of comprehensive data protection frameworks: data controllers also need to ensure no other laws impede the protection foreseen in data protection laws as well as the existence of effective judicial remedies. *Schrem I* and *Schrem II* have established data transfers from the EU to the US are still impeded by US surveillance laws and the absence of remedies available to EU citizens. The case law of the CJEU demonstrates how difficult it is to achieve 'a reasonable degree of pragmatism in order to allow interaction with other parts of the world' (Hustinx 2015) - to use the words of the Former European Data Protection Supervisor Peter Hustinx - when establishing whether a third jurisdiction offers an adequate level of protection or not. In view of the above, it appears therefore highly unlikely China will be recognised an adequate level of data protection in contrast, for instance, with Japan which was recognised such an adequate level of protection with the EU in an agreement signed in 2019.[47]

Concluding Remarks

The AI revolution implicates the emergence of an AI global order, which involves state and non-state actors alike, both competing for power and influence in the development and regulation of AI in line with their own strategic priorities and values. The EU has set for itself the objective of taking the leadership position within this global order, by creating its own kind of AI and persuading all other players that this is the example to follow. To consolidate its position, the EU has made use of regulatory activism, pushing intensely to be the first to regulate this technology, coming ever closer to this goal, especially with the publication of the AIA proposal, and of diplomacy, highlighting the need for global cooperation and its intention to facilitate it. While it already started collaborating with like-minded countries, the real challenge originates in the cooperation with players that hold if not opposite at least substantially different views on core concepts and values, such as it is the case of China. In order to become a leader in AI cooperation, the EU must find new and innovative

---

[45] *Data Protection Commissioner v Facebook Ireland Ltd and Maximillian Schrems* (case C-311/18, "Schrems II"). .

[46] *Maximillian Schrems v. Data Protection Commissioner* (Case C-362/14, "*Schrems I*"),

[47] Commission Implementing Decision (EU) 2019/419 of 23 January 2019 pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council on the adequate protection of personal data by Japan under the Act on the Protection of Personal Information (Text with EEA relevance)

ways to collaborate not only with countries which share its views almost entirely, but with other global players too, the most important of which is, arguably, China. The prospects of finding ways to cooperate with China remain, however, rather uncertain, taking into account the diverging perspective on three key issues - human rights, algorithmic citizenship, as well as data protection and privacy. It therefore remains difficult for the EU to attain the leadership position it currently hopes for, both in view of the external challenges outlined above and the internal ones, putting forward a convincing legislative proposal on AI, the first in the world of its kind, being a momentous challenge.

Bibliography

Primary Sources

Legislation

Commission Implementing Decision (EU) 2019/419 of 23 January 2019 pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council on the adequate protection of personal data by Japan under the Act on the Protection of Personal Information (Text with EEA relevance)

Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (Text with EEA relevance).

Case Law

Case C-362/14 *Maximillian Schrems v. Data Protection Commissioner* ("*Schrems I*").

Case C-311/18 *Data Protection Commissioner v Facebook Ireland Ltd and Maximillian Schrems* ("Schrems II").

Others

Council of Europe, Recommendation of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems, CM/Rec(2020)1, 8 April 2020.

European Commission and HR/VP contribution to the European Council, EU-China – A Strategic Outlook,<https://ec.europa.eu/commission/sites/beta-political/files/communication-eu-china-a-strategic-outlook.pdf>.

European Commission communication, "AI for Europe", COM (2018) 237 final

European Commission, "High-Level Expert Group on Artificial Intelligence",

<https://ec.europa.eu/digital-single-market/en/high-level-expert-group-artificial-intelligence>.

European Commission, "Shaping Europe's Digital Future",

<https://ec.europa.eu/info/sites/info/files/communication-shaping-europes-digital-future-feb2020_en_4.pdf>

European Commission, "White Paper - On Artificial Intelligence - A European approach to excellence and trust", COM (2020) 65 final.

European Commission, Communication, "AI for Europe", COM (2018) 237 final.

European External Action Service, 2019 EU-China Legal Affairs Dialogue, Press Release <https://eeas.europa.eu/delegations/china_en/60070/2019%20EU-CHINA%20LEGAL%20AFFAIRS%20DIALOGUE.>

European Parliament resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL))

Global Partnership on Artificial Intelligence, Joint Statement from Founding Members <https://www.gov.uk/government/publications/joint-statement-from-founding-members-of-the-global-partnership-on-artificial-intelligence>

High-Level Expert Group on Artificial Intelligence, "Ethics Guidelines For Trustworthy AI", 8 April 2019 <https://ec.europa.eu/futurium/en/ai-alliance-consultation.>

High-Level Expert Group on Artificial Intelligence, "Policy and Investment Recommendations For Trustworthy AI", https://ec.europa.eu/digital-single-market/en/news/policy-and-investment-recommendations-trustworthy-artificial-intelligence.

Proposal for a Regulation Of The European Parliament And Of The Council Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, Brussels, 21.4.2021 Com(2021) 206 Final

State Council Notice concerning Issuance of the Planning Outline for the Construction of a Social Credit System (2014-2020).

The Beijing AI Principles <https://www.baai.ac.cn/news/beijing-ai-principles-en.html#:~:text=For%20Humanity%3A%20The%20R%26D%20of,utilize%20or%20harm%20human%20beings>

The White House, Executive Order on Maintaining American Leadership in Artificial Intelligence, <https://www.whitehouse.gov/presidential-actions/executive-order-maintaining-american-leadership-artificial-intelligence/>

The White House, Guidance for Regulation of Artificial Intelligence Applications, <https://www.whitehouse.gov/wp-content/uploads/2020/01/Draft-OMB-Memo-on-Regulation-of-AI-1-7-19.pdf>

Secondary Sources

Abott K, Snidal D, "The governance triangle: Regulatory standards institutions and the shadow of the state", (2009) in The Politics of Global Regulation, Princeton University Press.

Ala-Pietilä P, Smuha N, 'A Framework for Global Cooperation on Artificial Intelligence and its Governance' (2020). Forthcoming in 'Reflections of AI for Humanity', coord. by Braunschweig B and Ghallab M, Springer (2021).

Ball K and Wood D, 'A Report on the Surveillance Society' (2006), Summary Report for the Information Commissioner, Surveillance Studies Network.

Boranbay-Akan S, König T, Osnabrügge M, "The imperfect agenda-setter: Why do legislative proposals fail in the EU decision-making process?" (2017), European Union Politics, 168.

Bradford A, The Brussels Effect: How the European Union Rules the World? (2020) Oxford University Press.

Buiten M, "Towards Intelligent Regulation of Artificial Intelligence" (2019) 10 *European Journal of Risk Regulation* 41.

Chen L, 'Codifying Personality Rights in China: Legislative Innovation or Scaremongering' (2018) in Ken Oliphant, Zhang Pinghua, Chen Lei (eds), *The Legal Protection of Personality Rights: Chinese and European Perspectives*

Chen Y-J, 'China's Challenge to the International Human Rights Regime', (2019), *New York Journal of International Law and Politics* 1180.

Chen Y-J, Lin C-F, and Liu H-W, 'Rule of Trust: The Power and Perils of China's Social Credit Megaproject', (2018) *Columbia Journal of Asian Law.*

Creemers R, 'China's Social Credit System: An Evolving Practice of Control', (2018), SSRN Paper, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3175792>.

Devereaux A and Peng L, 'Give us a Little Social Credit: to Design or to Discover Personal Ratings in the Era of Big Data', (2020) *Journal of Institutional Economics.*

Dumbrava C, 'The Citizen, the Tyrant, and the Tyranny of Patterns', Verfassungsblog on Matters Constitutional, 20 June 2019, <https://verfassungsblog.de/the-citizen-the-tyrant-and-the-tyranny-of-patterns/>.

Erdélyi O, Goldsmith J, 'Regulating Artificial Intelligence Proposal for a Global Solution' in: AAAI / ACM Conference on Artificial Intelligence, Ethics and Society. AEIS: 2018, 1-3 February, 2018, New Orleans, USA.

Ess C, '''Lost in translation''?: Intercultural Dialogues on Privacy and Information Ethics (Introduction to Special Issue on Privacy and Data Privacy Protection in Asia)', (2005) *Ethics and Information Technology* 7(1).

Ezrachi A, Stucke M, 'Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy', (2019) Harvard University Press.

Feldstein S, 'The Road to Digital Unfreedom: How Artificial Is Reshaping Repression', (2019) *Journal of Democracy* 40.

Gless S, "AI in the Courtroom: A Comparative Analysis of Machine Evidence in Criminal Trials", (2020) *Georgetown Journal of International Law*, 195.

Jiang R, Shi H, and Jefferson G, 'Measuring China's International Technology Catchup', (2020) *Journal of Contemporary China* 520.

Kostka G, 'China's Social Credit Systems and Public Opinion: Explaining High Levels of Approval', (2019) *New Media and Society*.

Lai Y-C, 'Human Rights and Sustainability in EU-China Relations: The Limits of Normative Power', (2019), *European Foreign Affairs Review* 555.

Lee J-A, 'Hacking into China's Cybersecurity Law', (2018) *Wake Forest Law Review*, 53.

Leibold J, 'Surveillance in China's Xinjiang Region: Ethnic Sorting, Coercion, and Inducement', (2020) *Journal of Contemporary China*.

Lin D and Trevaskes S, 'Creating a Virtuous Leviathan: The Party, Law, and Socialist Core Values', (2019) *Asian Journal of Law and Society* p. 46.

Livingston S and Risse M, 'The Future Impact of Artificial Intelligence on Humans and Human Rights', (2019) *Ethics and International Affairs* 155.

Lozada-Pimiento N, 'AI Systems and Technology in Dispute Resolution', (2019) *Uniform Law*

Mattlin M, 'Dead on Arrival: Normative EU Policy towards China', (2012) *Asia Europe Journal,* 181.

Moore M, 'Tech Giants and Civil Power' (2016), CMCP, Policy Institute, King's College London https://doi.org/10.18742/pub01-027

Pech L and Scheppele K L, 'Illiberalism Within: Rule of Law Backsliding in the EU', (2017) *Cambridge Yearbook of International Legal Studies* 14.

Qiang X, 'The Road to Digital Unfreedom: President Xi's Surveillance State', (2019) *Journal of Democracy* 53.

Raube K and Burnay M, 'Coherence, Strategy, and Legitimacy - Variations of a Theme in the Case of EU-China Relations', (2018) *Global Affairs* 291.

Renda A, "Europe: Toward a Policy Framework for Trustworthy AI" in Dubber M, Pasquale F, and Das S, (2020) 'The Oxford Handbook of Ethics of AI', Oxford University Press.

Scherer M, (2016) "Regulating artificial intelligence systems: Risks, challenges, competencies and Strategies", *Harvard Journal of Law & Technology*, 353.

Sithigh D and Siems M, 'The Chinese Social Credit System: A model for Other Countries?', (2019) *Modern Law Review.*

Van Der Meulen E and Heynen R, 'Unpacking State Surveillance: Histories, Theories, and Global Contexts' in Robert Heynen and Emily van der Meulen (eds.), (2019), Making Surveillance States: Transnational Histories, Toronto University Press.

Yeung K, Howes A, and Pogrebna G, 'AI Governance by Human Rights–Centered Design, Deliberation, and Oversight: An End to Ethics Washing', in Markus D. Dubber, Frank Pasquale, and Sunit Das (2020), 'The Oxford Handbook of Ethics of AI', Oxford University Press.

Others

Artificial Intelligence at Google: Our Principles" <https://ai.google/principles/> and "Microsoft AI principles", <https://www.microsoft.com/en-us/ai/responsible-ai?activetab=pivot1%3aprimaryr6>.

Cath-Speth C and Kaltheuner F, "Risking everything: where the EU's white paper on AI falls short", (New Statesman, March 2020), <https://tech.newstatesman.com/guest-opinion/eu-white-paper-on-artificial-intelligence-falls-short> accessed 1 November 2020.

European Data Protection Supervisor, The History of the General Data Protection Regulation, <https://edps.europa.eu/data-protection/data-protection/legislation/history-general-data-protection-regulation_en#>

Facial recognition to 'predict criminals' sparks row over AI bias", (BBC, 24 June 2020), <https://www.bbc.com/news/technology-53165286> accessed 1 November 2020

Harsano H, 'China's Surveillance Technology Is Keeping Tabs on Populations Around the World', The Diplomat, 18 June 2020, <https://thediplomat.com/2020/06/chinas-surveillance-technology-is-keeping-tabs-on-populations-around-the-world/.>

Hillman J, McCalpin M, 'Watching Huawei's 'Safe Cities'', CSIS Briefs, 4 November 2019, available at https://www.csis.org/analysis/watching-huaweis-safe-cities.

McCarthy-Jones S, 'Artificial intelligence is a totalitarian's dream – here's how to take power back', (The Conversation, 12 August 2020), <https://theconversation.com/artificial-intelligence-is-a-totalitarians-dream-heres-how-to-take-power-back-143722>,

Minsky C, 'One former Google exec says there's no hope for Europe's artificial intelligence sector', (Sifted, 2018) <https://sifted.eu/articles/interview-google-kaifu-lee-ai-artificial-intelligence/>

Mosher S,'China's New 'Social Credit system' is a Dystopian Nightmare', New York Post, 18 May 2019,<https://nypost.com/2019/05/18/chinas-new-social-credit-system-turns-orwells-1984-into-reality/.>

OECD, AI Initiatives Worldwide <https://www.oecd.org/going-digital/ai/initiatives-worldwide/> and The Future of Life Institute, National and International AI Strategies <https://futureoflife.org/national-international-ai-strategies/.>

Political values in Europe-China relations, ETNC Report, 2018, <https://merics.org/sites/default/files/2020-04/190108_ETNC_report_2018_updated_2019.pdf.>.

Robin Emmott and Angeliki Koutantou, 'Greece Blocks EU Statement on China Human Rights at U.N.', (Reuters, 2017) < https://www.reuters.com/article/us-eu-un-rights-idUSKBN1990FP>

State of the Union 2020 - President von der Leyen's speech, available at: https://ec.europa.eu/info/strategy/strategic-planning/state-union-addresses/state-union-2020_en

Stolton S, "Commission will 'not exclude' potential ban on facial recognition technology", (Euroactiv, 3 September 2020), <https://www.euractiv.com/section/data-protection/news/commission-will-not-exclude-potential-ban-on-facial-recognition-technology/>

Sullivan A, "AI: Government pledges billions aimed at bringing Germany up to speed" (DW 2018) <https://www.dw.com/en/ai-government-pledges-billions-aimed-at-bringing-germany-up-to-speed/a-46296320>