A 'New Technology World Order'? Will the Impact of Artificial Intelligence on International Diplomatic Practice Render Existing Diplomatic Law Obsolete?

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The legal commentary on artificial intelligence tends to focus on specific practical issues such as liability or security. While these are not futile endeavours, this focus on the implications of the direct implementation of AI within society diverts attention away from the less conspicuous and equally imminent effects of the technology. Development within this field will have considerable effect on international diplomatic practice: through changing the nature of communication itself and transforming the global landscape within which it takes place. The concurrent demise of the nation state and rise of big tech means that many powerful global non-state actors operate outside the sphere of existing international diplomatic law. This illustrates a legal void within which tech corporations act increasingly divergent to state practice, with potentially disastrous consequences for the future of AI development, as ethics are traded-off against profit. An interdisciplinary and multi-stakeholder approach is crucial to develop a governance framework for AI that balances public and private centred interests. In an era of globalisation and digitalisation, there will always still be a need for traditional diplomacy; AI will disrupt the channels through which it is conducted, and it is the contention of this article that while existing International Diplomatic Law requires reform, it is not obsolete.

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1. Introduction

The impact of artificial intelligence (AI) on the world as we know it is not a novel contemplation. For some, the future of development in this field is fraught with negative connotations and visions of killer robots, technological unemployment; the end of humanity.¹ Others believe advancements in AI could hold the solution to societal problems such as social care, and even global issues like climate change.² While these visceral perceptions of its potential effects may turn out to be valid predictions, they are extreme. Discussion in this sphere is largely based around the direct effects of AI technology, and the threats posed by it, on everyday life. However, the less conspicuous consequences may take effect sooner, and we must be prepared. Described as the next general-purpose technology,³ AI is defined as "the science and engineering of making intelligent machines."4 Advancement in this domain is often compared to past industrial revolutions, except that it will be both faster and larger.⁵ Unlike the steam engine or electricity, AI has the capacity to transcend and alter all aspects of society, and therefore the threshold that must be met for AI to become 'globally disruptive' is much lower than that of general-purpose technologies in the past.⁶ Likely long before we see the humanoid robots characterised by science-fiction movies walking our streets, AI would already have a profound impact in international relations and diplomatic practice.

¹ Mark Bryant, 'Artificial Intelligence Could Kill Us All. Meet the Man Who Takes that Risk Seriously' (*The Next Web*, 8 March 2014) <https://thenextweb.com/insider/2014/03/08/ai-could-kill-all-meet-man-takes-riskseriously/?fromcat=all#!zpEzt:> accessed 18 January 2021.

² David Rolnick and others, 'Tackling Climate Change with Machine Learning' (2019) Cornell University: Computers and Science <arXiv:1906.05433v2>.

³ Kai-Fu Lee, 'The AI World Order.' (*Kai-Fu Lee*, 2018) <https://kaifulee.medium.com> accessed 18 January 2021.

⁴ John McCarthy, 'What Is AI? / Basic Questions.' (jmc.Stanford.Edu., 12 November 2007) <http://jmc.stanford.edu/artificial-intelligence/index.html> accessed 17 January 2021.

⁵ Klaus Schwab, The Fourth Industrial Revolution (Currency Publishing 2017).

⁶ Matthijs Maas, 'International Law Does Not Compute: Artificial Intelligence and the Development, Displacement or Destruction of the Global Legal Order' (2019) 20(1) Melbourne Journal of International Law 29.

As vocalised by Stephen Hawking, "[s]uccess in creating effective AI, could be the biggest event in the history of our civilisation"⁷ and Vladimir Putin, "the one who becomes the leader in this sphere will be the ruler of the world,"8 the power of artificial intelligence is immense. From both the scientific and political realms, there is agreement that it will have significant influence on world order and power relations; AI as a topic on the international agenda is one that cannot be ignored. This is reflected in the numerous recent global initiatives that have been introduced to tackle the risks associated with AI: for example, the Council of Europe's ad hoc Committee on Artificial Intelligence (CAHAI)⁹ and the Global Partnership on AI.¹⁰ Rapid development in technology such as autonomous vehicles and weapons brings issues of security and ethics to the forefront, and governments must address their implications both domestically and internationally. The digitalisation of diplomacy is one representation of how traditional practice has evolved over the years, and the AI revolution means that it will continue to do so. With the growing influence of non-state actors (NSAs) and the unpredictability of the future capabilities of AI, it is unclear whether existing international diplomatic law is sufficient, let alone relevant. It is difficult to separate the issue of AI's impact on diplomatic practice, and the issue of AI as an international policy concern. Everyday diplomatic practice will undoubtedly be affected, but so will the broad landscape in which diplomacy takes place. Therefore, in order to effectively assess the adequacy of current legal protection, one must examine both AI's effect on diplomacy and how foreign ministries respond to this and influence its future.

There is much discussion generally on the ability of current law to accommodate for the changes brought by AI. As is the case with a lot of

 ⁷ 'AI and the future of diplomacy: What's in store?' (Internet Governance Forum, 13 November 2018) https://www.intgovforum.org/multilingual/content/igf-2018-ws-423-ai-and-the-future-of-diplomacy-what's-in-store-accessed 18 January 2021.

 ⁸ 'Putin: Leader in artificial intelligence will rule world' AP News (Moscow, 1 September 2017) <https://apnews.com/bb5628f2a7424a10b3e38b07f4eb90d4> accessed 19 January 2021.

⁹ 'Artificial Intelligence' (*Council of Europe*) <https://www.coe.int/en/web/artificial-intelligence/home> accessed 18 January 2021.

¹⁰ 'Home.' (*The Global Partnership on Artificial Intelligence*) <https://gpai.ai> accessed 18 January 2021.

legislation, the principal legal authority for diplomatic relations, the Vienna Convention on Diplomatic Relations (VCDR), was drafted in 1961, before the extent of technological development could be envisaged. The convention does not extend protection to actors who fall outside of the traditional definition of a nation state. With the emergence of powerful multinational corporations and organisations, this strict interpretation is no longer a true reflection of global players in the diplomatic field. Furthermore, the very substance of diplomatic relations - communication - has changed significantly with the advent of the smartphone, and the constant generation of vast amounts of new information.

This paper examines the impact of AI on international diplomatic practice and whether the changes it brings will be so material that existing law is rendered obsolete. The discussion will be divided into two main themes: AI and International Diplomatic Law, and AI and global power. It is important that these issues are studied in conjunction because of the way in which they interact; International Diplomatic Law is vital in regulating power relations, and as AI influences global power, this has an impact on diplomacy. Firstly, this paper considers the time-sensitive nature of this issue and why it is so important. It will then explore the evolution of diplomacy as a result of technological development, digital and cyber diplomacy, before looking at the current state of the law in this area. After analysing both the wider shift in power relations and the direct impact on diplomatic practice that will be brought by AI, and assessing the legal implications of these, it will be concluded that there must be a balance between traditional and new methods of diplomacy. Thus, it is argued that the transformation of diplomatic practice is such that the existing legal framework is outdated. However, it is not obsolete. There will always be the need for 'oldfashioned' face-to-face diplomacy, which can be aided through the practical use of AI. Foreign ministries must cooperate with multinational tech companies to define what the desired future is to look like, and promote initiatives such as TechPlomacy,¹¹ elevating emerging technologies to the forefront of foreign and security policy. There must be legal reform but also the construction of

¹¹ 'About TechPlomacy' (*Office of Denmark's Tech Ambassador*) http://techamb.um.dk/en/techplomacy/> accessed 19 January 2021.

supplementary soft-law to create an inclusive framework that can adapt to future developments.

2. Artificial Intelligence on the International Agenda

Despite its origins dating back to the 1950s, discussion about AI is largely absent from foreign policy agendas. General transformative technologies, "interrupt and accelerate the normal march of economic progress,"¹² and falling under this definition, AI demands immediate attention as a matter of universal importance. On the back of a digital revolution, the emergence of AI promises a strikingly greater transformation than that seen in the past; it facilitates the mechanisation of skilled as well as physical labour, meaning tasks previously requiring human cognitive ability may now be undertaken by machines.¹³ Furthermore, its capabilities are not confined to industry. While the steam train was the driving force of the industrial revolution, its technological competency was limited to industry. AI systems can be implemented across a broad range of tasks, in virtually every realm, resulting in unprecedented disruption at a societal and global level.

Undoubtedly the more deeply that AI is embedded into society, the bigger the transformation of diplomacy. Universally, governments must acknowledge this and engage in a discourse about how they want AI to impact their states. The relationship between global actors and AI is reciprocal, in that the changing technological landscape will undoubtedly impact both domestic and foreign affairs but simultaneously, certain policies could also shape AI's progress. By carefully formulating policies for development and choosing how best to govern it, states can manage how AI affects not just their own territory but how other states utilise it too. Aside from the desire to be ahead of the game for economic reasons, the mass of possible new security risks mean that there is also a need for states to actively participate in this discussion, for their own safety. Furthermore,

¹² Lee (n 3).

¹³ McKinsey Global Institute, 'Digitization, AI, and the Future of Work: Imperatives for Europe' (*Mckinsey* & *Company*, September 2017) <https://www.mckinsey.com/featured-insights/europe/ten-imperatives-for-europe-inthe-age-of-ai-and-automation> accessed 18 January 2021.

these risks are less likely to be addressed by the market than the opportunities.¹⁴ If states dismiss AI as being purely technological and better dealt with by the corporations who produce AI, this neglect will be to everyone's detriment as speed and advancement could be traded off against safety.

Foreign policy itself must be distinguished from diplomacy, the former composed by governments while the latter is performed by diplomats. However, foreign ministries must also play a part in the formulation of policy and in this respect, AI as a topic on the international agenda has a direct effect on diplomatic practice. A diplomat's work crucially involves the observation and communication of developments in other states that they are based in, as well as protecting the interests of their own nationals.¹⁵ Taking these functions into consideration, as well as the transformation of the global landscape in which diplomacy takes place, AI should be at the forefront of diplomatic practices today.

The term AI incorporates numerous processes and techniques. For the purposes of this paper, the AI referred to that will be used directly within diplomatic relations involves simple algorithmic techniques, such as those found in smartphones. Yet, speaking on a broader scale, it is the entire AI industry, and all that falls within it, that will disrupt international diplomacy in a redistribution of global power, by way of an already emerging AI arms race. The exact rate of development is uncertain and difficult to calculate. While technological evolution generally tends to be gradual, many are of the view that the AI revolution will happen much faster.¹⁶ With one breakthrough, there could be rapid progress across a broad range of functions. Each technological advancement empowers many others, unlocking new capabilities in a sort of multi-directional chain reaction. Danzig asserts that "technology often functions as an intensifier"¹⁷ and that the entire process of invention is simplified and

¹⁴ Allan Dafoe, 'AI Governance: A Research Agenda' (Future of Humanity Institute, University of Oxford, 27 August 2018) https://www.fhi.ox.ac.uk/wp-content/uploads/GovAIAgenda.pdf> accessed 18 January 2021.

¹⁵ Vienna Convention on Diplomatic Relations (adopted 14 April 1961, entered into force 24 April 1964) 500 UNTS 95 (VCDR) article 3.

¹⁶ Dafoe (n 14).

¹⁷ Richard Danzig, 'An Irresistible Force Meets a Moveable Object: the Technology Tsunami and the Liberal World Order' (2017) 5(1) Lawfare Research Paper Series.

accelerated through other technologies. Communication of new techniques and dissemination of designs can now be done instantaneously, and therefore the rate of further development will only continue to rise. Currently, AI remains 'narrow' in the sense that a system can be trained only to complete the specific task in hand. Advances in machine learning technology, a subset of AI, mean that through one common capability, a system can learn other closely linked activities. One breakthrough in this area could potentially unlock a level of general intelligence (AGI), triggering rapid universal progress in a multi-directional chain reaction. Generally associated as signifying the start of the posthuman era and the concept of 'singularity,' Bostrom asserts that AGI may result in a positive feedback loop, allowing AI systems to construct other, more advanced AIs.¹⁸

AI technology will continue to progress at an exponential rate for which, as of yet, there is no evident limit: there is nothing to suggest that AGI will not surpass human-level intelligence.¹⁹ Furthermore, aside from the concerns surrounding AGI, development in the field of narrow AI continues to be dramatic. It is natural human tendency that incremental change often goes unnoticed, and issues associated with current use of the technology already affect us considerably. Former President of the Supreme Court, David Neuberger, contends that the future presented by the media, diverts people's attention away from the real changes resulting from AI.²⁰ Maas and Stix assert that a gap exists between those scholars concerned with the short term impacts of AI and those who focus on the possible long term implications, and that this division hinders progress in the formulation of AI governance.²¹ It is important not to get swept away by sensationalist conceptions of AI's potential effects and adopt a pragmatic approach going forward. The ramifications of AI are not simply future concerns,

¹⁸ Nick Bostrom, 'How Long Before Superintelligence?' (1998) 2 International Journal of Future Studies.

¹⁹ Stuart Armstrong, Nick Bostrom, Anders Sandberg, 'Thinking Inside the Box: Controlling and Using an Oracle AI' (2012) 22 Minds and Machines 299.

²⁰ David Neuberger, 'Foreword' in Jacob Turner, *Robot Rules: Regulating Artificial Intelligence* (Palgrave Macmillan 2019) vii.

²¹ Charlotte Stix and Matthijs Maas, 'Bridging the Gap: the Case for an 'Incompletely Theorized Agreement 'on AI Policy' (2021) AI and Ethics https://doi.org/10.1007/s43681-020-00037-w/ accessed 18 January 2021.

they are a matter of the present, for which international governance is lagging. To emphasise this, Turner uses the analogy of climate change, asserting that if pre-emptive measures of governance were put in place decades ago, the state of the world now could have been very different;²² "[p]ut starkly, either we will rule the "game" or the "game" will rule us."²³

3. Artificial Intelligence and International Diplomatic Law

3.1 Existing Legal Framework

When looking to examine the ability of International Diplomatic law to cope with emerging technologies such as AI, it is valuable to consider global governance of AI in general. Much of the legal discussion on AI has been limited in the past to issues of safety and liability, and there has been little tangible progress in AI governance.²⁴ Developments are beginning to emerge, commonly in the form of ethical principles. Yet while these codes are often centred around the same key trends- such as privacy, transparency and accountability,²⁵ they remain disparate from one another. Not only is there currently no uniform system of governance, some areas appear to lack any regulation at all. Without an international system of rules, technological development and practice will become so divergent between states that there will inevitably be conflict. However, the concept of one coherent, universal body of AI law is problematic for several reasons. With it pervading so many aspects of society, it is difficult to

²² Jacob Turner, Robot Rules: Regulating Artificial Intelligence (Palgrave Macmillan 2019) 35.

²³ Joe McNamee, 'Governing the Game Changer - Impacts of Artificial Intelligence Development on Human Rights, Democracy and the Rule of Law' (Council of Europe High Level Conference, Helsinki, 26-27 February 2019) 1 <https://rm.coe.int/conference-report-28march-final-1-/168093bc52> accessed 18 January 2021.

²⁴ Dafoe (n 14).

²⁵ Jessica Fjeld and others, 'Principled Artificial Intelligence: Mapping Consensus in Ethical and Rights-Based Approaches to Principles for AI' (2020) Berkman Klein Center Research Publication No 2020-1.

determine which areas of AI could be protected by existing law and those which fall completely outside of the current framework.

The extremely dynamic nature of AI innovation complicates this differentiation even further, and any attempt to create rigid legal definitions would be futile. Therefore, there is contradiction between the need to procure rules that can be reasonably applied to AI and the complexity of demarcating something so fluid in nature. The general definition of AI given in the introduction can be broken down further, defining 'intelligence' as the "computational part of the ability to achieve goals in the world."²⁶ This definition is, among others, problematic from a legal standpoint. It is elliptical in the sense that it defines 'intelligence' by way of an equally vague word, meaning that it is difficult to know exactly what is encapsulated by it. Schuett contends that there is no definition for AI that meets the requirements for legal definitions.²⁷ Instead, the aim is to formulate a "functional definition"²⁸ that allows for legal regulation but doesn't restrict the scope of protection to allow for future development.

Additionally, there is the issue of who is best placed to make the rules. Governments have the authority to formulate new laws which will be recognised as such, yet given that AI is so technologically complex, they generally lack the scientific knowledge that is required to make an effective system of governance. As Boutin suggests, new technologies do not necessarily require new laws, "legal notions are flexible and abstract enough to adapt to new scenarios", ²⁹ perhaps AI developments can be assimilated into established legal norms. It would be incorrect to contend that all facets of AI can be encapsulated by existing legal frameworks, as it transcends so many sectors, and thus it must be looked at on a sector-specific basis.

²⁶ McCarthy (n 4).

²⁷ Jonas Schuett, 'A Legal Definition of AI' (2019) Cornell University Computers and Society arXiv:1909.01095v1.

²⁸ Turner (n 22).

²⁹ Berenice Boutin, 'Technologies for International Law & International Law for Technologies.' (Groningen Journal of International Law, 22 October 2018) <https://grojil.org/2018/10/22/technologies-for-international-law-international-lawfor-technologies/> accessed 20 January 2021.

The main body of law in relation to diplomatic practice is the Vienna Convention on Diplomatic Relations. Despite being drafted in 1961, it has thus far been compatible with technological development. There are 191 state parties to the convention, meaning it is effectively universal, and along with customary international law it provides core protection for all diplomatic missions, premises and communications. Since ancient times, diplomacy has been recognised as the "best means devised by civilisation for preventing international relations from being governed by force alone,"³⁰ and it remains a fundamental concept, even in a globalised world. Underpinned by the general principles of state sovereignty and equality, the purpose of international diplomatic law is essentially to maintain good relations between states and protect peaceful interactions. While the everyday practice of a diplomat has changed over time, the basic function remains the same. Set out in Article 3 of the VCDR, the list of functions of a diplomatic mission is not exhaustive, meaning it is flexible and able to adapt to new tasks as practice changes. Conduct by diplomatic agents, if it does not come under one of the traditional diplomatic functions, may still be protected by the VCDR if it can reasonably be interpreted as being consistent with the reasoning and purpose of the convention.

At the time of drafting, those at the Vienna conference could not have predicted the progression of modern technology. While the term 'artificial intelligence' was coined in 1956,³¹ there could be no comprehension of the sheer magnitude of the AI revolution. However, it is so ingrained into society that it could not be separated from diplomatic practice and thus there are many tasks related to AI that can be described as proper diplomatic functions. In order for diplomatic missions to carry out their functions, there are several fundamental principles of protection. Diplomatic agents are afforded privileges and immunities, the extent of which differ depending on their categorisation as a

³⁰ Ivor Roberts, 'Diplomacy - a Short History from Pre-Classical Origins to the Fall of the Berlin Wall' in Ivor Roberts (ed), *Satow's Diplomatic Practice* (7th edn, Oxford University Press 2017).

³¹ Chris Smith and others, 'The History of Artificial Intelligence' (University of Washington, December 2006)

<https://courses.cs.washington.edu/courses/csep590/06au/projects/history-ai.pdf> accessed 20 January 2021.

member of the mission, as defined in Article 1.³² The premises of the mission are also protected, and this inviolability extends to the property within,³³ all archives and documents³⁴ and all official correspondence.³⁵ These provisions are essential in allowing the purposes of the convention to be realised efficiently and therefore they must be compatible with the changes brought by AI if the VCDR is to remain relevant to modern diplomatic practice.

In practice, there are several issues pertaining to the relationship between AI and the Vienna Convention. Firstly, the emergence of non-state actors, namely large tech companies, as major players on the global field. This is problematic as the VCDR does not extend protection to non-state entities or employees of such, and therefore they are not bound by the same obligations as signatories. Accordingly, this means that relations between state and NSAs are not protected in the same way as state-to-state relations. Secondly, the use of technology within daily practice calls into concern the safety of diplomatic communication in the modern day and increasingly blurs the lines between domestic and foreign affairs. Originally published in 2013, the Tallinn Manual³⁶ is a non-binding study prepared by a group of experts from around the world, examining the application of international law to cyber warfare. Expanding on this analysis, a version 2.0 was released in 2017 which focuses on ordinary, everyday cyber issues: 'cyber operations'. Chapter 7 of the Tallinn Manual 2.0³⁷ provides rules on the application of diplomatic and consular law in a cyber context. The publication attempts to apply both existing treaty and customary law to issues relating to cyberspace, a sphere which largely overlaps with AI. Although it is not legally binding, it aims to provide a resource for legal advisers across the

³² VCDR (n 15) article 1.

³³ ibid article 22.

³⁴ ibid article 24.

³⁵ ibid article 27.

³⁶ Michael Schmitt (ed), *Tallinn Manual on the International Law Applicable to Cyber Warfare* (Cambridge University Press 2013).

³⁷ Michael Schmitt (ed), *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (Cambridge University Press 2017).

globe³⁸ and can be utilised as a reference for interpreting and expanding subjectspecific legislation, such as the VCDR.

On many of the matters discussed in Tallinn it was not possible to reach a consensus between the experts, and the study provides a commentary on all diverging views. This disparity is indicative of the highly controversial nature of cyber and technological issues and demonstrates the difficulty in cooperating on international rules. Wide variation in state practice, technological development and societal values means that reaching agreement can be problematic. Furthermore, due to the advantages to be gained by being first-movers within the AI industry, there is a level of secrecy that is inherent to states' views on operations within this field. In order to assess the relevance of existing international law in a world of increasing AI influence, this paper examines the relevant provisions of the VCDR, with reference to Chapter 7 of the Tallinn Manual 2.0.

3.2 Technology and Diplomacy

Over the decades, although the functions and premise of diplomacy remain mainly unaltered, the context in which it is conducted has undergone several transformations. The word 'diploma' denotes an official document, and accordingly, diplomats are those who deal with these. Inviolability of the agent has long been recognised as a means of ensuring safe and effective communication. With official correspondence delivered physically to the head of another state, there was reluctance to send a delegate through foreign territory unless their safety could be assured. On a basis of reciprocity, states guaranteed safety of passage throughout their territory for envoys carrying official messages. Bilateral agreements concluded between states accorded embassies and official communications protection from invasion and interception, for the same reason of ensuring diplomatic tasks could be carried out efficiently. This network of treaties and customary law was later consolidated into multilateral conventions, the most notable of which being the VCDR.

³⁸ 'Tallinn Manual 2.0' (*CCDOE*) <ehttps://ccdcoe.org/research/tallinn-manual/> accessed 20 January 2021.

In the modern world, physical presence is no longer required for the communication of official messages. Diplomatic correspondence more commonly takes the form of an email rather than a *Note Verbale*³⁹ and in many circumstances, communication is of a much more public nature. The sphere of diplomacy has not evaded the era of digitalisation and this conversion has many practical consequences. There are elements of AI already integrated into diplomatic practice; the term AI generally prompts connotations of complex machines acting with some level of human intelligence, yet many features in devices like smartphones also come under the definition. In this sense, through digitalisation, AI has already had a great direct impact on everyday diplomatic practice: most diplomatic agents own smartphones and many embassies utilise technology. In terms of planning for the future of diplomacy and AI, it can be useful to examine the impact of digitalisation and how diplomatic practice responds. While not all of the examples here constitute direct uses of AI, such as social media, they are illustrative of the effect that technology has already had on diplomacy: an effect that will likely be exacerbated by further implementation of AI.

3.2.1 Cybersecurity Diplomacy

In practical terms, the digitalisation of diplomacy has challenged the protection provided by the VCDR. Cybersecurity is an issue relevant to many areas of law, as is demonstrated by the extensive content covered in the Tallinn Manual. It is of concern therefore for governments and policy makers worldwide on a general level, but also in particular in relation to the safety of diplomatic communications. Article 24 of the VCDR provides that "[t]he archives and documents of the mission shall be inviolable at any time and wherever they may be".⁴⁰ However the provision gives no further definition of these terms and thus from the Convention alone, it is unclear whether they extend to protect electronic archives and documents. Included in the preamble is the sentence,

³⁹ Patricio Grané Labat and Naomi Burke, 'The Protection of Diplomatic Correspondence in the Digital Age Time to Revise the Vienna Convention?' in Paul Behrens (ed), *Diplomatic Law in a New Millennium* (Oxford University Press 2017). ⁴⁰ VCDR (n 15) article 24.

"[a[ffirming that the rules of customary international law should continue to govern questions not expressly regulated by the provisions of the present Convention".⁴¹ Therefore where there is ambiguity, one should look to applicable customary international law in order to fill the gaps. It is asserted that this inviolability is extended to include electronic archives and documents⁴² in international practice and there was consensus in favour of this demonstrated in Rule 41, Chapter 7 of the Tallinn Manual 2.0.43 Taking into consideration the purpose and object of the treaty, it is reasonable to conclude that they fall within the protection of Article 24, and this was affirmed by the House of Lords in 2013.44 Furthermore, the latter part of the provision means that archives and documents will be protected even when they are not within the premises of the mission or in the custody of a diplomatic agent. This can be taken to imply that electronic documentation that is stored on a remote server is inviolable, and the experts at Tallinn suggested that archives stored on a private remote server are protected so long as they are intended to be confidential and remain undisclosed to third parties with the consent of the sending state.⁴⁵ Accordingly, as soon as information is posted in a public server, it is no longer protected.

In terms of Article 27,⁴⁶ it is recognised in customary international law that electronic modes of correspondence are included. Therefore emails, text messages and even social media interactions are all inviolable as long as they constitute official correspondence. Under this provision, the protection goes even further: there is a positive duty imposed on the receiving state to "permit and protect free communication",⁴⁷ meaning that not only is the state required to refrain from intercepting the correspondence themselves, but they must also protect it from interference by other states and non-state actors. In addition to

⁴¹ ibid.

⁴² Grané Labat and Burke (n 39).

⁴³ Schmitt, *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (n 37).

⁴⁴ *R v Secretary of State for Foreign and Commonwealth Affairs, ex parte Bancoult* (No 2) [2008] UKHL 61.

⁴⁵ Schmitt, *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (n 37) chapter VII rule 41.

⁴⁶ VCDR (n 15) article 27.

⁴⁷ ibid article 27(1).

this obligation, Rule 40⁴⁸ proposes that the receiving state is also under a special duty to protect the cyber infrastructure on the premises of the diplomatic mission "against intrusion or damage". Neither obligation is regarded as absolute, and only requires the receiving state to take "all appropriate steps" to protect the diplomatic premises and correspondence.

While these provisions go some way in targeting interference with the cyber infrastructure and correspondence of diplomatic missions, it is unrealistic that it will actually prevent it. Cyber-attacks will become increasingly prevalent and more sophisticated with advancement in AI technology. Establishing liability will likely become more difficult as machine learning abilities progress and furthermore, the number of actors with access to the technology grows. This issue, known as the 'many hands' problem,⁴⁹ stems from the concept that liability is traditionally understood in terms of individual responsibility; while it is not unique to AI, the numerous components necessarily comprised in an AI system make it a highly relevant concern. The Vienna Convention is a "selfcontained regime"⁵⁰ and all available remedies for breaches of the convention are prescribed within its provisions. This means however that those who are not party to the convention cannot be held in breach of it. Although the duty to protect the premises and infrastructure therein refers to attacks from any origin, and thus the receiving state is obligated to protect against interference from nonstate actors, the non-state actors themselves are not bound by the rules of the VCDR. As the future of AI technology lies largely in the hands of non-state bodies, this is problematic as it leaves gaps that may compromise the confidentiality of diplomatic cables, and ultimately undermines the functioning of diplomacy.

⁴⁸ Schmitt, *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (n 37) chapter VII.

 ⁴⁹ Karen Yeung, 'Responsibility and AI: A Study of the Implications of Advanced Digital Technologies (Including AI Systems) for the Concept of Responsibility Within a Human Rights Framework' (Council of Europe, 2019)
https://rm.coe.int/responsability-and-ai-en/168097d9c5> accessed 18 January 2021.
⁵⁰ Sanderijn Duquet and Jan Wouters, 'Legal Duties of Diplomats Today: The Continuing Relevance of the Vienna Convention' in Paul Behrens (ed), *Diplomatic Law in a New Millennium* (Oxford University Press 2017).

Due to the unpredictable and complex nature of technology, governance in this area has been largely reactive. Various discourses on what 'security' means, reflecting societal principles, and differing levels of willingness to harmonise these ideas have resulted in a "patchwork cyber governance".⁵¹ As previously discussed, the AI revolution is gaining momentum and at an unprecedented speed. The capacity of the VCDR to encapsulate developments in cyber organisations demonstrates its flexibility and how it can be interpreted to protect new modes of diplomatic practice. However, this responsive method of governance will not suffice if we are to be prepared for the impact of AI on international diplomatic law. There must be a much more proactive approach that will take into consideration non-state actors, in order to ensure the continued efficient functioning of worldwide diplomacy.

3.2.2 Digital Diplomacy

Each new piece of technology contributes to the "acceleration of international relations"⁵²; from the telegraph in the 1800s, communication became faster and easier, and in general less official. This transformation was even more drastic with the invention of the internet. While the speed of correspondence is not necessarily new, the "ubiquity of information"⁵³ generated by the internet age is a phenomenon with far reaching consequences worldwide. It is asserted by former Google CEO Eric Schmidt that in the present day, as much information is created every two days, as has been from the beginning of civilisation,⁵⁴ and this statistic only continues to grow. Individuals are constantly bombarded with

⁵¹ Iiona Stadnik, 'Cybersecurity Diplomacy: Business and Tech Replacing the States?' (ECPR General Conference, Hamburg 2018) <https://www.researchgate.net/publication/327605493_Cybersecurity_Diplomacy_Bu siness_and_Tech_Replacing_the_States> accessed 20 January 2021.

⁵² David Paull Nickles, 'Under the Wire: How the Telegraph Changed Diplomacy' (Harvard University Press 2003) 79.

⁵³ Cristina Archetti, 'The Impact of New Media on Diplomatic Practice: An Evolutionary Model of Change' (2012) 7 The Hague Journal of Diplomacy 181.

⁵⁴ MG Siegler, 'Eric Schmidt: Every 2 Days We Create as Much Information as We Did up to 2003'(*TechCrunch*, 5 August 2010) <https://techcrunch.com/2010/08/04/schmidt-data/> accessed 17 January 2021.

new information in all settings of life, meaning that society is becoming more informed while simultaneously being increasingly susceptible to disinformation. People from all over the globe have the ability to group together in communities of interest, creating large information-sharing networks and consequently, gaining an audience is easier than ever.

Digitalisation and globalisation have resulted in a blurring of the lines between foreign and domestic, and diplomats are progressively engaging with populations outside of their own state. Public diplomacy refers to this interaction: effectively the antithesis of traditional diplomacy, where diplomats communicate via public statements and through the media. These expressions address both officials and the general public of the diplomat's home state but also that of other territories and would conventionally be the result of domestic political tension. However, social media has produced a new kind of public diplomacy. With a Twitter account, diplomats and world leaders can communicate directly and instantaneously with millions of people. On one hand this is a powerful tool to gather domestic support for foreign policy in a domestic context. This is particularly pertinent these days, as many challenges faced locally must be tackled on a global scale, such as climate change. Social media platforms can also be utilised to build ties with populations of other territories and diplomatic counterparts, and online interaction may be used to publicly demonstrate cooperation on certain issues.

On the other hand, as asserted by political science professor Adler-Nissen, use of social media within diplomatic practice can be dangerous. Access to social media during the negotiation process and when establishing points of collaboration, tasks that would traditionally be undertaken outside of the public eye, undermines diplomacy's "three foundational pillars".⁵⁵ Successful diplomacy is grounded in three elements: time, space and tact. Firstly, the process of negotiation requires time: a solid agreement necessitates back-and-forth proposals of ideas and redrafting. Furthermore, it demands space; there must be distance between the negotiators and also the dialogue itself, so that decisions can be made in confidentiality that best reflect both parties' interests.

⁵⁵ Rebecca Adler-Nissen, 'Behind the Scenes of Digital Diplomacy', (*Ted Talk*, 12 June 2017) <http://tedxcopenhagen.dk/talks/behind-scenes-digital-diplomacy> accessed 18 January 2021.

Finally, diplomacy fundamentally involves tact. While the formality of diplomatic communication may be considered gratuitous or outdated, a level of sensitivity and care over the phrasing of correspondence is necessary in order to reach an effective outcome. Negotiating parties often have broad cultural differences and in the context of conflict between states, protocol and tact can facilitate an agreement.

The use of social media during negotiations, and in conducting discussion itself, challenges these foundations of diplomacy. Reacting in real time can compromise the integrity of any agreement reached. This was illustrated during discussions between the EU and Ukraine in 2013 to end violent protests in Kiev, when the Polish Foreign Minister tweeted confirming the brokering of a deal from inside the negotiation room, before it had been confirmed. He was applauded by the public for seemingly consolidating the deal, however, was largely criticised by the other negotiating parties for potentially jeopardising the peace process.⁵⁶ With a public audience, the pressure to respond instantly means that the process of negotiation is rushed and likely not the best outcome possible. Moreover, with a maximum character limit to posts on many social media platforms, there is only a certain amount of tact that can be incorporated into messages and thus they can be easily misinterpreted or cause offence.

With such large proportions of states' populations now on social media, vast data sets are created. These are of high value, as data is what AI technology runs on, described as the "new oil".⁵⁷ It cannot be overlooked that both state and non-state actors can exploit this digitalisation in ways that undermine democratic and diplomatic processes, as was demonstrated very publicly in the Cambridge Analytica scandal.⁵⁸ A further concern of digital diplomacy and increased online presence is the prevalence of disinformation, and this is heightened through the capabilities of AI technology. As our data-driven

⁵⁶ ibid.

⁵⁷ Corneliu Bjola, Jennifer Cassidy and Ilan Manor, 'Public Diplomacy in the Digital Age' (2019) 14 The Hague Journal of Diplomacy 83.

⁵⁸ Ash New, 'Brexit: The Uncivil War Showed us how the EU Referendum was Won with Data Science.' (*Towards Data Science*, 11 January 2019. https://towardsdatascience.com/brexit-the-uncivil-war-showed-us-how-the-eu-referend-um-was-was-with-data-science.2d727as03fc0, accessed 18 January 2021

referendum-was-won-with-data-science-3d727ee03fc0> accessed 18 January 2021.

interactions increase in frequency, so will algorithm driven engagements and thus the potential for being fed disinformation will grow. AI systems can produce doctored or fake images, videos and online interactions mimicking human characteristics so closely that it can be very difficult to discern what is genuine. This is a challenge for both the public, who wish to be well informed, and the leaders and diplomats disseminating real information. The tangible dangers of disinformation have never been clearer, with Donald Trump's tweets deemed as having a directly causal effect on the violent January 2021 Capitol riots, leading to his account being permanently suspended from the platform.⁵⁹ Modern world leaders' fixation with conducting business in the public spotlight and the use of technology such as smartphones is putting pressure on traditional diplomatic practice. Despite the obvious risks, public diplomacy undoubtedly has its merits in building stronger networks of support both domestically and abroad, and technology can facilitate this. Transparency can be beneficial, however, there will always be a need for traditional diplomacy, away from the public eye. AI can be integrated into this more conventional diplomatic practice, and utilised in a way that targets dissemination of disinformation and exploitation of data.

Digital technology can contribute to a number of diplomatic functions. In fact, as the volume of information that must be processed in order to carry out vital tasks increases, use of technology may become essential. Public diplomacy, if utilised correctly, can rally support for diplomatic treaties which in turn may become political support. An example of this in practice is Obama engaging with the American public over Twitter to gather backing for the Iran Nuclear Agreement, resulting in Congress endorsing it.⁶⁰ The gathering, sorting and communicating of information is a fundamental function of the mission, and AI technology can be employed to expedite and enhance these tasks. Algorithms can be used to sort through large sets of information, and the data sets to underpin use of this technology within diplomatic tasks already exists in the form of legal texts. This 'text-as-data' approach could be used to both identify existing

 ⁵⁹ 'Twitter "permanently suspends" Trump's account' (*BBC News*, 9 January 2021)
https://www.bbc.co.uk/news/world-us-canada-55597840 accessed 18 January 2021.
⁶⁰ Corneliu Bjola and Ilan Manor, 'Revisiting Putnam's Two-Level Game Theory in the Digital Age: Domestic Digital Diplomacy and the Iran Nuclear Deal' (2018) 31 Cambridge Review of International Affairs.

and create new international law, asserts Deeks.⁶¹ Foreign state's customary law can often be difficult to establish, and AI tools could aid in identifying this. In relation to treaty negotiations, machine learning could assist in determining the other negotiating party's preferences and past tendencies, and to predict which terms are likely to be agreed on. Inside the negotiation room, software could also be implemented to facilitate instant translation and emotion recognition. At present, there are several examples of algorithms already being employed in diplomatic practice. The Israeli Ministry of Foreign Affairs use algorithms to "map social-media bubbles" that promote certain narratives about Jewish communities and then engages with members of these online publics, providing them with factual information and building relationships.⁶² Another example of this in practice is the crowdsourcing of information by the FCO in relation to the conflict in Syria, where social media was used "to listen to and identify key voices during the Libya crisis and Arab spring, thus serving as an open-source for collecting intelligence, warning of impending developments, and identifying key influencers".⁶³ As long as the data source is reliable, in the future, algorithms could be programmed to react in a certain way to a given scenario facilitating quick responses in cases of emergencies abroad. The concept of 'virtual diplomacy' has also been proposed, with virtual embassies: the idea holding appeal due to the expense of a proper diplomatic mission as well as the increasing difficulty of organising around changing family dynamics, security issues and diminishing diplomatic privileges in modern times.

While these manifestations of technology mays seem complex, they can be integrated simply into the existing diplomatic toolbox. The digitalisation of diplomacy could give rise to innumerable benefits, including the expedition of negotiation, ultimately leading to stable relations and peace. Yet, it is important to be mindful of the way technology is distributed worldwide among diplomatic actors, so that negotiation outcomes do not favour those with greater resources. On a general level, technology is a good platform to communicate with non-

⁶¹ Ashley Deeks, 'High-Tech International Law.' (2020) 88 George Washington Law Review 575.

⁶² Bjola, Cassidy and Manor (n 60).

⁶³ Jess Pilegaard, 'Virtually Virtual? The New Frontiers of Diplomacy' (2017) 12 The Hague Journal of Diplomacy 316.

state actors and form the coalitions with tech companies that are needed to create a "trusted digital environment".⁶⁴

4. Artificial Intelligence and Global Power

4.1. The Demise of the Nation State and the Rise of Big Tech In 2018, Apple declared their biggest annual turnover to date of 265.6 billion U.S. dollars,⁶⁵ which saw a growth of over 15% since the previous year. This statistic is dwarfed by Amazon, whose net revenue in 2019 was 280.5 billion⁶⁶, having doubled over just three years, closely followed by that of Google, Microsoft and Facebook, who along with the other two tech giants have become known as the 'frightful five'.⁶⁷ These numbers considerably surpass that of numerous countries' GDP. Amazon is about equivalent financially to Chile.⁶⁸ Despite these figures, none of these corporations are recognised by existing law, and the majority of states, as legitimate global diplomatic actors and are thus not protected by the Vienna Convention. Parties to the VCDR are all nation States as defined in Article 1 of the Montevideo Convention on the Rights and Duties of States:⁶⁹ they have a permanent population; a defined territory; a government;

⁶⁴ Bjola, Cassidy and Manor (n 60).

⁶⁵ Arne Holst, 'Apple's revenue worldwide from 2004 to 2020' (*Statista*, 4 January 2020) <https://www.statista.com/statistics/265125/total-net-sales-of-apple-since-2004/> accessed 18 January 2021.

⁶⁶ Tugba Sabanoglu, 'Annual net sales of Amazon 2004-2019' (*Statista*, 30 November 2020) https://www.statista.com/statistics/266282/annual-net-revenue-of-amazoncom/> accessed 18 January 2021.

 ⁶⁷ Farhad Manjoo, 'Tech's 'Frightful 5' Will Dominate Digital Life for Foreseeable Future' (*NY Times*, 20 January 2016)
https://www.nytimes.com/2016/01/21/technology/techs-frightful-5-will-dominate-digital-life-for-foreseeable-future.html> accessed 18 January 2021.

⁶⁸ 'Projected GDP Ranking' (*StatisticsTimes*, 20 November 2020) <http://statisticstimes.com/economy/projected-world-gdp-ranking.php> accessed 18 January 2021

⁶⁹ Convention on Rights and Duties of States adopted by the Seventh International Conference of American States (adopted 26 December 1933, entered into force 26 December 1934) (Montevideo Convention) article 1.

and finally, the capacity to enter into relations with other states. Thus, abiding by this narrow definition, companies and IGOs cannot sign or ratify the VCDR nor enjoy its protection. Relatively recently, supranational organisations such as the UN and the EU have been recognised as international diplomatic actors with legal personality, despite not fulfilling the criteria of a nation state. While they are not covered by the VCDR, their constituent instruments confer privileges and immunities upon the organisation and personnel which are similar but not identical to that of a diplomat. The EU has 'ambassadors' in many third states and other international organisations, meaning it interacts similarly in many ways as a nation state.

Living up to their name, the power held by these tech companies is enormous, and cannot be overstated. Moreover, although this power stems from accumulation of wealth, it extends much further than being purely economic. The tech industry possesses considerable social and political influence, controlling "the infrastructures of public discourse and the digital environment for elections,"⁷⁰ and thus the mechanisms that are essential to democracy. Described by scholar Shoshana Zuboff, as "surveillance capitalism,"⁷¹ the algorithmic model originally created to improve targeted advertisement and allowing corporations such as Facebook to gather individuals' personal data in the process, has had potentially catastrophic consequences on democracy. Private sector activities within the AI domain immensely surpass that of nation states; with South Korea's annual investment of 862 million U.S. dollars into the industry⁷² completely overshadowed by the funding allocated by the 'big five', who in 2018 invested between 20 and 30 billion U.S. dollars.⁷³ Many NSAs now wield powers that until now were reserved to nation states. Yet, the two types of

⁷⁰ Danzig (n 17).

⁷¹ Soshana Zuboff, *The Age of Surveillance Capitalism* (Profile 2019).

⁷² Mark Zastrow, 'South Korea trumpets \$860-million AI fund after AlphaGo "shock" (*Nature*, International Weekly Journal of Science, 23 March 2016) https://www.nature.com/news/south-korea-trumpets-860-million-ai-fund-afteralphago-shock-1.19595> accessed 19 January 2021.

⁷³ McKinsey Global Institute, 'Artificial Intelligence. The next Digital Frontier?' (*McKinsey & Company*, June 2017) https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/how-artificial-intelligence-can-deliver-real-value-to-companies accessed 18 January 2021.

entity continue to operate on increasingly divergent paths. A maintained separation between states and corporations will be massively detrimental to the future of AI and our ability to govern it in a way that balances the interests of both the public and private sectors.

4.2 A New Technology World Order?

On top of this growth in non-state power, there is an increasing shift in world order. "Inequality that comes from developments in AI and deep learning will not be contained within national borders", 74 those states who are front runners in the AI industry, currently the US and China, will jump even further into the lead. Where technology was formerly nearly exclusively military, the driver of AI is primarily commercial, resulting in a reshuffling of global markets. As it runs on a "cycle of data-driven improvements",⁷⁵ each progression accelerates further development and as states accumulate more data, one breakthrough by an actor already at the top of the market could lock in a monopoly. Typically, more socialist market economies like China, where the state has access to vast data sets, are already at a global advantage. In 2017 China announced an AI Development Plan, outlining plans to become "the world's largest economic power" through increased focus and funding given to AI, with the industry valued at \$150 billion.⁷⁶ Already, the country has invested in numerous small European tech firms and start-ups as a way of "capturing innovation,"77 as well as offering considerable benefits to employment within the AI sector.78 China could plausibly "create an ecosystem that the rest of the world depends on,"79

⁷⁴ Lee (n 3).

⁷⁵ ibid.

⁷⁶ Abishur Prakash, 'The Geopolitics of Artificial Intelligence: As the U.S. and China Vie for Global Influence, AI will be Central to the Balance of Power' (Scientific American, 11 July 2019) https://blogs.scientificamerican.com/observations/the-geopolitics-of-artificial-intelligence/> accessed 19 January 2021.

⁷⁷ Bjola, Cassidy and Manor (n 60).

 ⁷⁸ Fabian Westerheide, 'China – The First Artificial Intelligence Superpower' (Forbes, 14 January 2020) https://www.forbes.com/sites/cognitiveworld/2020/01/14/china-artificial-intelligence-superpower/#2557a6b62f05> accessed 18 January 2021.

⁷⁹ Prakash (n 76).

accumulating data from abroad through the exportation of products, and channelling it back into the industry. This funnelling of technological aptitude into states that are already at the top of the market intensifies the gap in power to an even greater extent. Within the field of international law itself, Deeks points out that even if international lawyers or diplomats in certain countries remain skeptical about the benefits of utilising AI, they cannot prevent other states implementing such tools to their advantage.⁸⁰ Consequently, it is a priority for even the states that do not wish to use it. In largely industrialised countries, there is expected to be large productivity gains, flowing mainly to the capital holders.⁸¹ As human labour value decreases this is likely to result in increased inequality and pressure on social welfare systems. Developing countries whose economies rely on cheap labour will lose this advantage and poverty will escalate further.

If the development of AI continues on this trajectory, becoming a global race, the future looks bleak. Whoever does win the AI race will have considerable influence on what AI regulation will look like, and this must be taken into account when considering which values should underpin it. While the claim that governments do not understand technology is unsubstantiated, states have been arguably naive to the power of big tech. Coupled with the private sector's wariness of centralised governance, this has created a "diplomatic deficit in the old structures of international relations"⁸² that does not make sense in the current context of world power. NSAs are showing increasing capacity to take centre-stage within the global order, yet states are not demonstrating the requisite capacity to react to this power. The universal nature of AI demands a multi-stakeholder approach, that transcends national borders as well as conventional approaches to foreign policy. Despite being relatively small, Denmark was the first country worldwide to acknowledge this shift in power by appointing a Tech Ambassador in 2017.⁸³ This TechPlomacy initiative has a

⁸⁰ Deeks (n 61).

⁸¹ Ryan Avent, *The Wealth of Humans: the Future of Work in the Twenty-first Century* (St Martins Press 2016).

⁸² Caspar Klynge and others, 'Diplomacy in the Digital Age: Lessons from Denmark's TechPlomacy Initiative' (2020) 15 Hague Journal of Diplomacy 3.

⁸³ Bjola, Cassidy and Manor (n 60).

global mandate, with offices in Copenhagen, Beijing and Silicon Valley; this presence allowing for direct communication and collaboration with the tech industry. Other countries have since followed suit, with France, Taiwan, and Ireland all developing similar initiatives in recent years. These enterprises promise to bring significant benefits to small states without the technological resources of those countries at the top of the market.

AI makes this dialogue more necessary than ever and of benefit to the individual states themselves, as they can utilise industry ties to shape the future of technology in a way that conforms to their national mandate. "TechPlomacy is about putting democratically elected governments back into the equation,"84 and offers a practical solution to ensuring the future of AI governance takes a human-centred approach. While viable in theory, this approach has not been without its pitfalls. Denmark's first tech ambassador left the post in early 2020 for a job at Microsoft, confessing that he had found it difficult to instigate "meaningful discussions" with tech corporations.⁸⁵ This points to a lack of motivation within Silicon Valley to work with states towards an ethical framework of governance for AI. It is the mandate of more recent initiatives, such as the Global Partnership on AI to facilitate the sharing of multistakeholder research and AI concerns, to promote the concept of "trustworthy AI."⁸⁶ Launched in 2020, with currently nineteen member states, partnerships like this one bridge the gap between government bodies and industry experts, and could well build the momentum necessary to get tech companies on board.

5. The Future

5.1 Upholding the Principles of Diplomacy

There are several obstacles to the harmonisation of AI and traditional diplomacy that must be overcome. Effective governance going forward and integration into

⁸⁴ Klynge and others (n 82) 9.

⁸⁵ Christian W, 'Denmark to get new tech ambassador' (*CPH Post Online*, 24 August 2020) accessed 18 January 2021">https://cphpost.dk/?p=117711:> accessed 18 January 2021.

⁸⁶ 'About' (*The Global Partnership on Artificial Intelligence*) accessed 18 January 2021">https://www.gpai.ai/about/:> accessed 18 January 2021.

the existing framework of diplomatic relations requires a fusion of new and old techniques: "new forms of diplomacy remain complementary to traditional diplomacy".87 However, where new practices challenge the fundamental principles of diplomacy, they must be adapted to ensure the functions of diplomatic practice can be realised. The unprecedented transparency of the digital age must be counterbalanced with the need for confidentiality. While the public deserves a true understanding of the individuals behind negotiations and the accountability that public diplomacy provides, the importance of secret, 'back-channel' diplomacy in finalising agreements cannot be overstated. Use of AI for diplomatic tasks also requires a certain level of transparency, in order to show that its application is ethical and those implementing it must be considerate of any bias that may be produced, either through biased input data or built into the system during development. On a global level, the emergence of non-state actors into the diplomatic field is problematic for several reasons. Firstly, diplomatic relations function largely on a basis of reciprocity and this is difficult to achieve without a physical territory. This can be addressed by establishing Tech ambassadors with a physical presence, somewhat like an embassy, in the same territory as the headquarters of tech companies. Furthermore, the shift in global order resulting from the AI revolution threatens the principles of sovereignty and equality. States with large data sets or technological capabilities are at an automatic advantage when dealing with tech companies, and some states may not have the technology at all. Again, it is for this reason that smaller countries must follow Denmark's example, and acknowledge the changing landscape of diplomatic practice by generating dialogue with the private sector producers of AI technology. This is an opportunity for those states with less technological prowess to become knowledgable about the industry.

⁸⁷ Jess Pilegaard, 'Virtually Virtual? The New Frontiers of Diplomacy' (2016) 12 The Hague Journal of Diplomacy 316, 335.

5.2 AI Governance

Through the cooperation of the public and private sectors, a set of international norms can be established to supplement existing law. As AI impacts so many areas of society, the codes that govern it must consider issues of ethics, morality and politics, rather than being purely technical.⁸⁸ AI threatens to erode the state-based legal system as we know it. With tech companies operating at the same level as nation states, it is no longer correct to conclude that nation states exclusively should make international law and therefore this interaction is crucial. The dynamic and evolutionary nature of AI technology means that the establishment of strict legal definitions is futile and therefore, it must be governed by soft law. Large tech companies have already proposed regulatory frameworks for this purpose, such as the Digital Geneva Convention⁸⁹ by Microsoft, or the Tech Accord.⁹⁰ It is unlikely that there will be one streamlined code of conduct that can apply to all actors, and therefore a network of regulation, underpinned by international norms is the most appropriate form of governance for AI.

6. Conclusion

It is undeniable that the AI revolution will have a considerable impact on diplomatic practice, as it will on virtually every aspect of society. The stage in which diplomacy operates has changed substantially and will continue to do so, as AI becomes a topic on every state's agenda. Issues of security, economics and politics that emerge with technological development mean that governments simply cannot ignore AI any longer. AI's effect on diplomatic practice is twodimensional: the employment of technology within every day diplomatic tasks and the broader evolution of diplomatic actors. Use of technology within

⁸⁸ Thomas Burri, 'International Law and Artificial Intelligence' (2017) 60 German Yearbook of International Law 91.

⁸⁹ Observer Research Foundation, 'Why we urgently need a Digital Geneva Convention' (*Microsoft,* 29 December 2017) https://www.microsoft.com/en-us/cybersecurity/blog-hub/why-we-urgently-need-digital-geneva-convention> accessed 17 January 2021.

⁹⁰ 'Cybersecurity Tech Accord,' (*Tech Accord*) <https://cybertechaccord.org/accord/> accessed 19 January 2021.

diplomatic practice has both positive and negative consequences, and if it is to be beneficial in the future, diplomats must be educated on how it can be utilised appropriately. The VCDR is flexible in that it can encapsulate new diplomatic functions and be interpreted in a way that protects new technology, as demonstrated in relation to cyber operations. However, the transformation in the diplomatic landscape is radical enough that the existing legal framework is no longer sufficient. Initiatives like TechPlomacy and the Global Partnership on AI must be adopted universally if the world is to be prepared for a new AI world order. Discussions between governments and experts from the tech field can facilitate informed use of technology within diplomatic practice and furthermore can work towards establishing legal norms that reflect the interests of both the public and private sector. Ultimately, AI will not render the current law obsolete in that there will always be the need for traditional diplomacy, and thus, regulation of this. New methods of diplomacy, aided by AI, can be integrated into this conventional framework. However, the wider ramifications of AI necessitate reform of the VCDR, or new regulation to encompass non-state actors, and supplementary soft law to shape the future impact of AI on international diplomatic law.