Diplomacy and Artificial Intelligence in Global Political Competition

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The arts of diplomacy have traditionally been associated with the balance of power, which is one of the founding principles of Realpolitik. By taking into account the fact that reconciliation has historically been necessary between conflicting parties, diplomats have been trusted with the role of mediators. This mediating function has promoted the establishment and development of Ministries of Foreign Affairs (MFAs) and representations, and also the association of diplomatic practice with the concept of co-operation. This commonplace view of diplomacy has enabled it to constantly establish and renew itself under different systems of world politics, from the early modern period to the present day (see Youssef in this volume). Although diplomacy as a process of communication and negotiation has been present wherever different and competing political entities have existed, and thus surrounded by continuous changes, it has been able to successfully adapt until now without changing its core. To paraphrase Iver B. Neumann (2013, 2015), old sites of diplomacy have assumed new characteristics, while new sites are physically and virtually emerging.[1]

The enormous growth in political interest and economic investment in artificial intelligence (AI) has the potential, this chapter argues, to produce fundamental changes in both the practice of diplomacy and the nature of inter-state competition. Although it may seem that AI is one of the neutral fields in which there is no increasing state competition, in practice this assumption is misleading. As AI can offer governments sustainable competitive

advantages, rivalry encourages states and other political actors to use diplomatic capabilities to achieve their goals. Given that AI-powered technologies have great potential to rearrange winners and losers in global markets, and thus to affect the balance of power in world politics, it is unsurprising that they are becoming a major focus for diplomats and diplomatic institutions. Yet the nature of AI technology challenges traditional assumptions of how diplomacy should function. As AI interacts with a wide range of conventional foreign policy issues, it requires specific knowledge from diplomats, structural reorganizations, and process re-engineering in foreign ministries. "The imminent transformations of AI", observe Scott, Heumann and Lorenz,

> "intersect with conventional foreign policy issues in fundamental ways. At the highest level, it is the impact on the balance of global power. The potential that AI brings to advance national economic and security interests has triggered a heated competition among governments to gain a strategic advantage [...] it will not be enough to create a special office for AI" (2018: 7-9).

Given that large AI companies are already influencing the international agenda, this in turn requires greater involvement and expertise of diplomatic institutions in setting international framework conditions for AI.

The purpose of this contribution is to investigate how diplomacy, as an instrument of foreign policy, can adapt to the emergence of AI as a rapidly developing technology in an era of intensified global competition. It does not seek to offer a definitive conclusion concerning the relationship between diplomacy and competition. Rather, it aims to describe the complexity and interplay between diplomacy and competition in the race for dominance in the emergent technology of emerging artificial intelligence. It considers, first, how diplomacy has evolved and since the end of the Cold War, before evaluating its interactions with present-day state competition. It then pivots to consider the role of AI in reshaping the role of diplomacy in state competition and raises the question of whether AI can be considered a novel and qualitatively different arena for state competition, in contrast to more long-standing policy fields such as climate, trade and human rights.

The Transformation of Diplomacy

Traditional understandings of diplomacy have been related to its use as the primary instrument for the implementation of national foreign policies. In this case, diplomacy is associated with the MFA, which has played a vitally significant role in the central administrative hierarchy of many states for several centuries and continues to do so today. Since at least the turn of the 21st century, however, there has been a significant expansion in the variety of participants and political processes in the international system. Diplomacy must now be understood more broadly. It cannot be reduced just to what is practiced by MFAs but should instead be regarded as a part of a far more multifaceted international process. It is also important to take into account varied types and sub-types of diplomacy, which have proliferated since the beginning of the 21st century (Barston 2006; Constantinou et al. 2016; Cooper et al. 2013; Stanzel 2018).

It may often seem that diplomacy, understood as a mere instrument, has no decisive significance in world politics (Brown 2019; Cohen 2013; Tavares 2018). On this view, diplomats are actively involved in the preparation of visits, participates in high-level negotiations or fulfil other diplomatic duties, but their role is not determining (Singh 2002). This is to understate, however, the crucial enabling role that diplomacy plays in modern world politics. According to Sending, Pouloit and Neumann (2015: 1): "many global phenomena of our time, from international law to world order, through humanitarianism, global hierarchies, and public power, are made possible by evolving forms of diplomacy". Political, economic, safety and social issues are only the most visible fields which are promoted by diplomatic transformation. Given that diplomacy as a "master-institution" of international politics (Wight 1979: 113) has undergone major changes in the last thirty years, it is important to look at the main features of change in diplomacy.

Since the end of the Cold War, dynamic changes have been observed in diplomacy, which over many centuries has been convincingly associated with foreign policy implemented by the state and has been a vital component in the implementation of national interests. "To the degree that contemporary diplomacy is new," writes Iver B. Neumann (2015: 3),

> "it is not because of diplomacy's internal dynamics. Neither it is due to the emergence of new core tasks. Newness stems from change in the general political and social fields that surround diplomacy."

Globalization (Eisenstadt 2012), increasing competition and a "rapidly changing international environment" (Moses/Knutsen 2001: 357; Leijten 2019: 3) require us to review the significance of diplomacy in a wider pattern and context. New types and varieties of diplomacy that take place in different sites are explicit confirmation of this (Cooper et al. 2013). Digital diplomacy (Bjola 2018; Bjola/Zaiotti 2021), science diplomacy (AWTI 2017; Melchor 2020; Miremadi 2016; Rüffin 2018; Soler 2020) and innovation diplomacy (Bound 2016; Leijten 2016, 2017) are only a few examples that demonstrate the nature and variety of diplomatic changes.

One way to understand and analyze rapid changes in diplomacy is through the approach of James N. Rosenau (2009). In describing fundamental changes in the international system, the author uses the term "turbulence". According to Rosenau, this influences the very foundation of the international system (ibid). The changes caused by turbulence are more rapid than normal political changes, and they do not take place via conventional forms of interaction in international policy. Moreover, "turbulence" is characterized by complexity and instability, as well as by its sometimes contradictory nature. Describing "turbulent" transformation, Rosenau has proposed the bifurcationist paradigm that

"focuses on two prime sets of tensions deemed to be unfold in world politics during the present era: one highlights tensions between change and continuity and the other involves the tensions that flow from the clash of centralizing and decentralizing dynamics which shape the changes and sustain the continuities" (Rosenau 2006: 218).

In this context of the dynamics of change and statics of continuity researchers such as Murat Gül (2009) have argued it even if it is still unclear whether global turbulence is a permanent or a temporary condition, changes are transforming the parameters of world politics.

One example of the impact and dynamics of change is the MFA (Hocking 2007; Rana, 2004, 2007, 2011, 2013; Rana/Kurbalija 2007). The MFA has historically fulfilled the role of "gate-keeper" between international and domestic politics (Hocking/Spence 2002: 1-17). In conformity with national interests and norms of activity developed over centuries, the MFA has been regarded as an exclusive public administration institution, the monopoly status of which in foreign affairs is not doubted. However, the situation has changed since the end of the 20th century because the MFA, although still the leading public administration institution in foreign affairs, is forced to take the activities

of other institutions and participants into account (Constantinou et al. 2016; Hocking/Spence 2002; Kleiner 2008; Rana 2011). Moreover, the variety of new participants and subjects in foreign affairs has been promoted even more by globalization and processes related to information and communication technologies.

Nowadays, it is impossible to find any central administration institution which would be internationally isolated or closed (Greenstock 2013: 115). The MFAs are no exception. In response to external environmental changes, foreign services today are forced to restructure and expand their boundaries. Adapting Brian Hocking's theoretical reflections on images of diplomatic systems (2002), the MFA is a good example of a transition from the "gate-keeper" model to "boundary-spanner image". The new model is based on the assumption of a reformed MFA, which, by relinquishing its monopoly on foreign affairs, places itself at the center of international relations. Unlike a traditional ministry of foreign affairs where the "gate-keeper" approach dominates, the "boundary-spanner" delegates part of its functions to other participants, and serves as a service provider to all those who need support in the use of international mechanisms. In this case, we can talk about support mechanisms for other public administrations, as well as diverse support for representatives of different social groups, such non-governmental organizations (Hocking/Spence 2002: 1-17).

Speaking about the provision of support to other state institutions, it is important to discuss the use of the "whole-of-government approach" in the formation of international issues and managing of public administration (Christensen/Lægreid 2007). The types of support MFAs offer to other public institutions may be different, starting from the co-ordination of cross-institutional issues, to the servicing of all government institutions. They thereby act as the central component of a "national diplomatic system" (Hocking 2016: 74-75). The functions of the employees of diplomatic representatives have similarly broadened. In order to be able to establish a co-ordinated policy in host countries, the powers of activity of ambassadors of many countries have been broadened and they are fulfilling the role of the "national team leader" abroad (Rana 2011: 136).

Regardless of the size of the country or political regime, the role of the MFAs in the co-ordination of foreign policy has thereby increased. The ability to form the "whole-of-government approach" in foreign affairs by promoting the co-operation of all administrative institutions in the achievement of common political objectives is regarded as the essential factor in the modern-

ization of the work of MFAs (Hocking et al. 2012). More attention is paid to the use of action policy instruments in practice and work outside the central body: for example, the creation of co-operation with diasporas and activities of commercial diplomacy (Birka/Kļaviņš 2020). By responding to varied agenda issues, more and more specialists are being employed in MFAs alongside diplomats of a classical type. Diplomacy embraces an even wider range of subjects which also means the acquisition of new and varied knowledge for diplomats or agents involved in the diplomatic process, such as the use of newest technologies in the formation of national branding, the applicability of artificial intelligence in the promotion of the competitiveness of the country or the creation of scientific diplomacy (Bjola 2019, 2020).

Diplomatic representations abroad are also becoming more varied and are forced to redirect their activity to specific work tasks and functions (Hocking et al. 2012). The number of mobile and joint embassies is accordingly growing. Diplomats are involved more actively in the creation of the national image by using innovative communication solutions (Bjola/Holmes 2015). More emphasis is also placed on a social networking and partnership-orientated approach, which helps the MFAs to create purposeful co-operation with non-governmental actors (Hocking et al. 2012; Moses/Knutsen 2001; Rana 2011).

One of the features which characterizes the essence of diplomacy in the 21st century quite well is the use of modern means of communication in everyday circulation, which change the nature of diplomatic communication. Digital proficiency has become almost a must-have skill in many MFAs. Brian Hocking and Jan Melissen (2015) have rightly argued that it is necessary to keep in mind that "the use of websites and social networking sites like Facebook, Twitter and other online platforms for public diplomacy is just the tip of the larger digital iceberg" (Hocking/Melissen 2015: 30). During the COVID-19 pandemic even so-called Zoom diplomacy has become "the New Normal" for diplomats worldwide (Boehm 2020; Shapiro/Rakov 2020). These new means of communication—which generate vast quantities of information for diplomats to process—change the dynamics of diplomatic work, demanding faster responses and new principles for the selection of relevant information to communicate to other government agencies. With a view to establishing closer dialogue with society, many MFAs are seeking to reduce the time necessary to reach a co-ordinated position across government agencies, or to reach common decisions about policy (Rana 2011; Hocking et al. 2012, 2013).

Although it may seem that diplomacy has already experienced significant changes the trends of development of diplomacy and increasing competition

in world politics (e.g. promoting and attracting Foreign Direct Investment) confirms that many large changes are still expected: the emergence of AI as a major policy field foremost among them.

If we view such changes from the perspective of conventional diplomacy, there is an issue regarding the readiness of each country and ability to adjust to such changes. Will MFAs be able to successfully adjust their practice to new types and formats of co-operation with other governmental and non-governmental actors? The rapid development of technologies and the financial possibilities of non-governmental players will continue to be a challenge for the foreign ministries of small countries. As MFAs play a crucial role in the changing "national diplomatic system" (Hocking 2013) and in implementing numerous foreign policy goals, small countries will be required to balance the "tous azimuts" foreign policy approach with their real capabilities. Insufficient financing and human resources may even cause encumbrances for the full functioning of the services of foreign affairs of these countries in competitive global politics. On the other hand, such challenges may also encourage small countries to explore and specialize in particular foreign policy niches. The next section describes how AI affects diplomacy, as well as the role of diplomacy in this growing international competition. To better answer these questions, it is first important to define what artificial intelligence is.

Artificial Intelligence and Competition

Analyzing the international challenges of AI transformation, Ben Scott, Stefan Heumann, and Philippe Lorenz (2018) describe three topical areas (economic disruption and opportunity; security and autonomous weapons systems; democracy and ethics) that require the engagement of diplomacy. These challenges also require a specific foreign policy toolbox, which includes policy making, public diplomacy, bilateral and multilateral engagement, actions through international and treaty organizations, conventions and partnerships, grant-making and information-gathering and analysis (Scott/Heumann/Lorenz 2018). All of these activities are likely to have a strongly competitive dimension. As Claudio Feijóo (2020:1) and others have noted, "many expect that the winners of the AI development race will dominate the coming decades economically and geopolitically, potentially exacerbating tensions between countries". Due to the expansion of big data, advanced algorithms and fast computing power, AI has become a highly

demanded technology of the 21st century. While AI technologies and applications continue to evolve and shape many industries and sectors such as transportation, security and healthcare, the AI field in general "is shifting toward building intelligent systems that can collaborate effectively with people, including creative ways to develop interactive and scalable ways for people to teach robots" (One Hundred Year Study on Artificial Intelligence (AI100) 2016: 9). Conversational AI, large-scale machine learning, robotics, Internet of Thigs (IoT), deep learning, natural language processing, neuromorphic computing, reinforcement learning, computer vision, collaborative systems, algorithmic game theory, computational social choice, crowdsourcing and human computation are rapidly expanding areas of AI research (Yao 2020; One Hundred Year Study on Artificial Intelligence (AI100) 2016: 9). Although the manifestations of AI are different, they are united by a common goal—"to create computer software and/or hardware systems that exhibit thinking comparable to that of humans, in other words, to display characteristics usually associated with human intelligence" (Lucci/Kopec 2015: 6).

The competition for AI superiority has been ongoing for several years and is widely analyzed in the literature (Allen/Chan 2017; Cummings 2017; Drezner 2019; Feng 2019; Horowitz et al. 2018; Johnson 2019). There are several reasons for this, but the main ones are economic benefits because it can dramatically boost productivity. According to Bell, "one of the great promises of AI is its potential for improving quality of life" (Bell 2018). Michael C. Horowitz (2018: 39) also points out that "AI competition could feature actors across the globe developing AI capabilities, much like late-19th-century competition in steel and chemicals." The growing importance of AI is also evidenced by the strategies adopted by the superpowers and statements by the country leaders. As "artificial intelligence has become the new engine of economic development" (Cui 2020: 10), the State Council of the People's Republic of China released a roadmap in July 2017. In order to surpass its rivals technologically and become the world leader in AI by 2030, China has the aim of making the industry worth 1 trillion yuan ($150 billion) (The New York Times 2017). Moreover, Chinese President Xi Jinping has also "called for efforts to break new ground" in diplomacy (Chen 2018). In summer 2018, China's Foreign Ministry has already acknowledged that several prototypes of AI-powered diplomatic systems are under development in China. According to an article published in the South China Morning Post, "the programme draws on a huge amount of data, with information ranging from cocktail-party gossip to images taken by spy satellites, to contribute to strategies in Chinese diplomacy." (Chen 2018)

The Chinese Ministry of Foreign Affairs has already announced its plans to use AI technology to facilitate the work of diplomats in China's 'Belt and Road Initiative' (ibid). Given the limited availability of information on this issue and the general confidentiality of diplomacy, however, it is too early to judge and assess the impact of these AI solutions.

Meanwhile, in order to balance China's ambitions to accelerate dominance in AI and seek dominance in emerging technologies, US President Donald Trump signed the Executive Order 13859 on maintaining American leadership in AI in February 2019. As President Trump noted: "continued American leadership in Artificial Intelligence is of paramount importance to maintaining the economic and national security of the United States" (The White House 2019). China and the US are not the only frontrunners in AI international race. Russia has also stated that it wants to be involved in this great-power competition. Russian President Vladimir Putin has said AI offers "colossal opportunities and threats that are difficult to predict now" (The Associated Press 2017). Moreover, Putin has stated "the one who becomes the leader in this sphere will be the ruler of the world" (ibid). Not only China, US and Russia are competing with each other to develop nation AI strategies and gain a strategic advantage. In the face of growing global competition, more than 20 countries, including Argentina, Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Saudi Arabia, Sweden and United Kingdom, have launched AI initiatives and strategies (OECD 2019). Moreover, international organizations such as the European Union (EU), United Nations (UN), the Organisation for Economic Co-operation and Development (OECD) and even regional players such as the Nordic-Baltic region have published AI strategy documents.

According to Katharina Höne, a DiploFoundation researcher who analyses the interplay between diplomacy and AI:

> "Countries are working on their competitive advantage in terms of AI. Very often, the sense of competition is in relation to US and China, the two countries that are seen as leading in the technology and have the capacity to make quick developments on AI research and application. Other countries are always looking at these two countries as guideposts, something to compare themselves to and as something to work in relation to" (Foster 2019).

AI technologies have already showed the potential to be politically and economically destabilizing. Russia's interference in America's 2016 presidential election (Hass/Balin 2019) and disputes over technologies are disrupting

global trade (Lucas 2018; The New York Times 2019). Moreover, analyzing AI's ability to reshape the global order, Nicholas Wright has addressed the coming competition between liberal democracy and digital authoritarianism. According to Wright, the debate over the impacts of AI has been dominated by the worry that AI has the potential to exceed human intelligence. Moreover, there is also a belief that AI and machine can surpass humans in almost every area of society (Wright 2018). That being said, Wright believes that there is another aspect in which AI technologies and solutions promise to reshape the world. "By enabling governments to monitor, understand and control their citizens far more closely than ever before, AI will offer authoritarian countries a plausible alternative to liberal democracy, the first since the end of the Cold War" (ibid). One of the countries already building and operating such AI systems is China, thus participating in "a global competition with liberal democracy" (Wright 2019: 13). Depending on whether there is a democratic or authoritarian regime, the country's foreign policy, including diplomacy, is adapted to the political focus of its choice.

Competition can be minimal or even hard to detect, while at the same time it can be clear and even aggressive. In the context of the competitiveness of national or international organizations, the role of diplomacy can be difficult to discern because it employs conventional diplomatic practices to pursue foreign policy goals. In contrast, where states or international organizations have declared ambitious goals and formally expressed their commitment to compete with other political actors, this allows diplomacy to be pursued more vigorously. A rapid increase of financial and human resources in one of the foreign policy areas, frequent requests for meetings and new appointments of diplomats in the specific field indicates the strategy chosen by the country. The competition for AI superiority simultaneously has both a direct and indirect effect on diplomacy. Diplomats are directly involved in the preparation of negotiating themes, but also participate in negotiations between intergovernmental and international organizations. AI undoubtedly expands the scope of the agenda in diplomacy. Participating in negotiations or involving diplomats requires diplomats to be competent in dealing with AI issues. In order to ensure appropriate qualifications in AI matters, MFAs or international organizations choose to recruit specialists or train and better prepare career diplomats. Ongoing competition in the AI field also requires diplomats to develop new and in-depth forms of collaboration with new actors such as large corporations, specialized think-tanks or research centers focusing on AI.

As diplomacy is an integral component of foreign policy and is actively involved in international policy-making, the promise of AI as a public good and sustainable competitive advantages also indirectly influences diplomacy. In recent years, MFAs in many countries have been actively researching, developing and deploying AI-enabled technologies (Bjola 2019, 2020). That being said, the goals for the implementation of AI solutions are different for each country and are not always related to the competition aspect. They can be purely practical, for instance, to ensure a faster flow of information or to provide a more efficient service to the citizens (e.g. consular services). Authors such as Michael C. Horowitz, Gregory C. Allens, Edoardo Saravalle, Anthony Cho, Kara Frederik and Paul Sharre (2018: 11-12) believe that AI technologies have the potential to transform the practice of diplomacy by reducing language barriers between countries through language processing algorithms and identifying potential risks and vulnerabilities to diplomats and diplomatic missions by image collection, recognition and information sorting. In order to deliver and deploy AI solutions in diplomacy, Corneliu Bjola (2020) suggest that MFAS deploy the TIID (Task, Innovation, Integration, Deployment) framework as a conceptual roadmap. According to Bjola, "that combines considerations about what the objective is (task improvement), how to accomplish it (innovation), with what resources (physical/digital integration) and in what institutional configuration (deployment)" (Bjola 2020: 42).

In the context of AI, it is difficult for states to be isolated and to pursue a policy of neutrality. Through various forms of diplomacy, such as digital or economic diplomacy, or combinations thereof, countries are looking for ways to achieve their goals faster. As AI systems and solutions have profound impacts on geopolitical and economic power balances (Cummings et al. 2018), states and other political agents use diplomacy as part of their chosen strategies in international competition. There are several strategies of competition in AI in which diplomacy can play a role as a mediator. These include investments in technology, building military power, formal alliances, economic primacy, economic statecraft, informal partnerships, diplomacy to shape the international environment, information and public diplomacy campaigns, embedding influence in rules and institutions, lawfare, intelligence and clandestine activities. In order to achieve a competitive advantage over other international actors, countries can choose one or a combination of several means of competing (Mazarr et al. 2018: 24-27). Focusing on states' strategies for addressing competitive situation must not overlook the fact that diplomacy is a key foreign policy tool. If countries like China are pursuing an aggres-

sive AI strategy, then other powers will be forced to compete. If the foreign policy goals are ambitious and the statements of the leading politicians are clear, then diplomacy is subordinated to these attitudes and all the possibilities available to the foreign services of these countries are used. As many researchers point out, this is a unique moment because countries need to decide quickly what to do next (Scott/Hemann/Lorenz 2018; DiploFoundation 2019; Oxford Insights 2019). Delayed action can create even more risks and threats for countries. At the same time, it is important to remember that without competition in the world, cooperation is unthinkable. Often, both manifestations are closely linked in terms of relations between countries. In the context of US-China competition, Ryan Hass and Zach Balin (2019) state the following: "AI will create both immense stress on the U.S.-China relationship as well as opportunities for potential collaboration". Hass and Balin also point out that one way to overcome the trend of global competition in the field of AI would be to identify areas where the US and China are mutually beneficial and where there is a clear risk of conflict (ibid). The authors also point out that both countries should not look at AI as a zero-sum game, but seek a new and more balanced approach. This would allow them "to build cooperation where interests are aligned, which would give both sides greater confidence in dealing with issues where they divide" (ibid). Knowing that AI-driven technologies are playing an increasingly important role in issues such as autonomous weapons, surveillance and censorship, like-minded liberal democracies will be forced not only to compete but to work even more closely together. These threats and potential risks will require governments and international organizations to invest more in their human and financial resources.

Conclusion

The terms of competition in world politics are not set by any one actor. Instead, they are created and developed under the influence of many actors. Like diplomacy itself, which has experienced considerable development since the end of the Cold War, competition itself is constantly evolving and difficult to capture.

Countries have different perceptions of innovation and AI rivalry, which strongly influence the evolution of their diplomatic practices and institutions. Great powers such as the US and China are ready for an aggressive competition in which diplomacy plays an important role. Using diplomacy, countries

seek allies and try to persuade undecided political actors to support their priorities. Like-minded states, such as the Nordic and Baltic countries, do not, by contrast, pursue an explicit strategy of competition with one another. On the contrary, using regional co-operation formats such as the Council of the Baltic Sea States (Ozoliņa/Etzold 2020), NB-6 (Nordic-Baltic Six), NB-8 (Nordic-Baltic Eight) and the Baltic Council of Ministers, Northern European countries are looking for ways to become more integrated in the Baltic Sea region. The Nordic countries also aim to be at the forefront in the ongoing battle for democratic and rules-based cyberspace. As stated in the Nordic Foreign and Security Policy 2020, one of the goals of the Nordic countries "should also be to support the development of expertise and private initiatives within competitive fields, such as Artificial Intelligence (AI) and quantum computing to develop international credibility" (Bjarnason 2020: 19). Expertise in AI is also of great importance. As several authors points out, competition for highly qualified personnel in AI has also intensified in recent years (Cummings et al. 2018). A recent Chatham House Report states that "governments worldwide must invest in developing and retaining home-grown talent and expertise in AI if their countries are to be independent of the dominant AI expertise that is now typically concentrated in the US and China" (Cummings et al. 2018: vi).

States and other international actors may pursue foreign policies or strategies that are difficult to operationalize. New foreign policy initiatives, an increase in funded research, or an increase in the number of announcements in a particular area attest to the willingness of a political actor or agent to be a 'player' in this field of competition. It is important to note here that the competition over AI is not restricted to the US and China. Although the political, economic or social influence of these actors in world political processes may seem insignificant, small states can influence processes in world politics. There are many examples where small countries, with the support of public diplomacy or other types of diplomacy, have been able to significantly promote nation branding, attract more investment, and succeed in negotiations with multinational corporations, as well as create their own international framework conditions and address grand challenges. Denmark, which has the world's first 'Tech Ambassador' and has recently appointed a climate ambassador, is one of many such examples.

In line with foreign policy or international practice, diplomacy adapts and serves as a support tool in countries' efforts to make joint progress in the use of AI, while securing their own vital interests in this powerful set of emergent

technologies. Diplomacy can also the competition for AI superiority or pursue less ambitious but competing goals in the AI field. In addition to traditional activities of national interest, MFAs are involved in building AI expertise as it could offer improved effectiveness, speed and augmentation (Bjola 2020: 42). As developments in AI are so dynamic and comprehensive, the race for AI superiority imposes new obligations on the actors involved. To paraphrase Joseph E. Stiglitz, who has previously stated that "designing a competition policy that works will be the most important part of the strategy for maintaining competitiveness in the market economy" (2002: 22), it is important for national governments to develop a long term AI strategies in which diplomacy can play a leading role as a mediator between the competing interests of states, civil society, and private sector actors.

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