The Metaverse Diplomacy: A Future Vision for Türkiye

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ABSTRACT *One of the critical questions for the future of the Metaverse is whether it will be global and singular –or multiple, company or country based. This question is yet to be answered, but unique metaverse universes, which will be built based on regional integrations rather than McWorld monopolization, will gain value in the future for the healthy operation of the Metaverse. The Organization of Turkic States (OTS), which was developed into an international organizational structure through the initiative of Turkish President Recep Tayyip Erdoğan last year, offers a form whose effectiveness is increasing daily in the global system, in keeping with the 2040 Vision of the Turkic World. Under Türkiye's leadership, the Turkoverse, a unique Metaverse universe in which the members of the OTS will interact, can be built. By integrating the capital cities of the member states into this structure, their geographical distance will be eliminated, and the free movement of labor and money within the Turkic World will be possible. Ultimately, this step will protect Türkiye and other Turkic states from uncertainties about the future of the larger Metaverse. This paper investigates the extent to which the Metaverse is the next big thing in diplomacy and how Türkiye can impact the formation of a new norm that will eventually affect the global system.*

Introduction

In April 2022, the former CEO of Reddit, Yishan Wong, tweeted, "The internet is not a "frontier" where people can go "to be free," it's where the entire world is now, and every culture war is being fought on it. It's the MAIN battlefield for our culture wars."[1] Wong's remarks call attention to the importance and ever-changing nature of the Internet itself. From Web 1.0 to Web 4.0, many things have already changed in Internet usage. As Wong notes, the platform was once the space for freedom of speech; now it is a battlefield for exporting culture. Thanks to the uploads of some major cities, the culture wars have expanded their frontiers into the Metaverse. Seoul, South Korea, for example, enjoys a leading position in the race to become digital; as a result, people can virtually visit the uploaded 'Metaverse Soeul' –even 'live' there virtually, make purchases, and fall in love with Korean culture. *Hallyu*, the Korean Wave, is preparing to surpass millions digitally in sales volumes driven by Metaverse-enabled content.

Web 3.0 is seen as the next step of globalization, and the global, digital transformation process has only accelerated with the effects of the COVID-19 pandemic. Based on this accelerated transformation process, the blockchain system could gain ground with the increasing prevalence of cryptocurrencies and their growing worldwide transaction volume. Many countries, from Estonia to El Salvador, have already recognized cryptocurrencies as official currencies.[2] The claim that Non-Fungible Tokens (NFT) are a new digital property model based on the blockchain system has also emerged. As the evolving space in which digital transformation is taking shape, the Metaverse has become one of the hottest topics on the global agenda.

The Metaverse concept was first coined in the science fiction novel Snow Crasher by Neal Stephenson in 1992. Stephenson describes the Metaverse as a computer-generated universe in which people interact as pieces of software called 'avatars,' the audiovisual 'bodies' that people use to communicate and interact with each other.[3] The Metaverse was advanced as a concept in Ernest Cline's science fiction novel Ready Player One, which was subsequently popularized as a hit movie.[4]

Metaverse, from 'Meta-' (a prefix meaning post, after or beyond) plus Universe, is defined as "A virtual-reality space in which users can interact with a computer-generated environment and other users."[5] As the definition implies, the Metaverse requires a computer-based environment and internet access. In practice, however, the Metaverse is more than a space of interaction between users: it is a post-reality universe.[6]

In 2021, the Metaverse became a hot topic more widely, i.e., beyond the realm of science fiction, due to the social media giant company Facebook's branding

transformation. Mark Zuckerberg, *Facebook*'s CEO, announced in October 2021, that the company's name would be changed from *Facebook* to Meta Platforms.[7] He then made an audio-visual presentation that revealed the potential of the Metaverse, which was undoubtedly influential in the Metaverse's sudden appearance on the world agenda. Zuckerberg's presentation drew the attention of academics and social media users alike and resulted in a spike in academic articles on the Metaverse.[8]

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The historical transformation of *Facebook* –one of the most popular social media platforms globally– represents a turning point for the future of other social media platforms. As Zuckerberg presented in his announcement showcase, the anticipated Metaverse will be a realistic society in terms of enabling more direct and tactile contact; yet it will be a fantasy/imagination space as well: users will have almost infinite options in choosing the characteristics of their avatar, with race, gender, height and weight adjustable, and physical limitations and disabilities removed from the equation. Metaverse development is still in its early stages, with much room for growth. The industry has already begun to prepare for Metaverse's enormous potential, supported by frenzied investment, yet there are at present few talks about the Metaverse in academia to lead its development scientifically or geopolitically. For instance, there has been scarcely any academic study that explains what the Metaverse promises for the future of International Relations (IR). And almost no academic article has tackled Türkiye's Metaverse future regarding the Organization of the Turkic States (OTS).

So, the question is what might International Relations look like in the Metaverse? Barbados' initiative to open embassies in the Metaverse enabled diplomacy to be conducted thereby introducing the presence of the state. Such a presence in the Metaverse brings up many questions for states, such as the sovereignty dilemma. One of the distinguishing features of statehood is territory; how can states control the purchase of NFT properties and access them in Metaverse universes? Relatedly, do existing collaborations or digitally signed agreements only pertain to the virtual plane, or do they include the physical world? What international laws would the Metaverse necessitate?

One of the critical questions for the future of the Metaverse in terms of IR is whether it will be a global, unified Metaverse universe or multiple, company, or country based. If the Metaverse is dominated by private companies –without states' intervention in its structure– it will eventually be reigned by chaos. For instance, currently, in some Metaverse universes, there are history tours,[9]

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in which you can visit historical events with your avatar. The question is, "who" is orchestrating such events? Because it's open to being a target for spreading disinformation or blaming some nation with false accusations. This example is just the tip of the iceberg if there is no state intervention scenario happens in the Metaverse. A better alternative would be Metaverse universes, which will be built based on regional integrations rather than monopolization; these gain value in the future for the healthy operation of the Metaverse.

Many questions are yet to be answered for the future of the Metaverse. The present study is intended to be an introduction to the Metaverse through the lens of International Relations. Thus, it aims to shed light on the Metaverse's potentials and risks for states, explore what Metaverse-enabled diplomacy might look like for states, and, most importantly, consider what Türkiye can do in regard to the development of a Metaverse presence as the incumbent leader of the OTS. The potential technologies to be developed in the Metaverse field are reviewed in the study, and a roadmap called 'the Turkoverse' is proposed for the OTS. Turkoverse, which will be a unique Metaverse universe built within the OTS to be based on Turkic World geography with the participation of the member states. If developed, the Turkoverse would have the potential to provide solid ground for economic development, technology transfers, and educational and technological transformation for the OTS member states. As mentioned above, Metaverse universes, which will be built based on international organizations or regional integrations rather than monopolization, will gain value in the future for the healthy operation of the Metaverse.

As mentioned above, if companies solely run Metaverse universes, it will eventually create monopolization. For instance, in the Metaverse, users become a digital identity through an avatar, and thanks to that digital identity in Metaverse, they can work, travel, purchase/sell, and earn money. Nevertheless, to do so, they must accept the proposed terms and conditions. Without states' existence in the Metaverse, the million-dollar question is, who will put the rules or regulations for those terms and conditions? Companies running the Metaverse will decide and act for the rules, and each company will eventually want to maximize its interest in its business. Imagine a scenario; a user work at a firm in this hypothetical company's Metaverse, and the next day, that company announces that they will raise taxes to 100 percent for salaries. Alterna-

Turkish President Recep Tayyip Erdoğan attends the Forum Metaverse in Ankara, Türkiye on March 21, 2022.

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tively, the company decided to sell personal information to third parties, or a security breach happened. For instance, virtual reality headsets might hypothetically allow third parties to collect more sensitive personal data, including voiceprint data, biometric data, and even facial geometry. Or if they copy digital identities and make them work like digital non-stop workers? Questions may sound futuristic, but no more than thirty years ago, *Siri* (Apple's AI for the products such as iPhone, iPad, and Mac computers) like AI programs could only be imagined in sci-fi movies. As Antigone Davis, Global Head of Safety at Meta said: "In order to address safety in a comprehensive way as the Metaverse emerges, we need to partner with others in government, industry, academia, and civil society."[10] It is essential to set the ground rules for the structure of the Metaverse in general because as Gartner predicts 25 percent of the World population will spend at least one hour per day in the Metaverse and 30 percent of the organizations in the world will have products and services ready for the Metaverse by 2026.[11]

Metaverse 101: What Is It?

More than a concept, the Metaverse vision has recently attracted much attention and is considered the next stage of the Internet together with Web 3.0. Moreover, the COVID-19 pandemic has accelerated states' digital transformation within the international system. Within the ecosystem made possible by this transformation, the Metaverse was able to flourish as a vision and

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its impact on diplomacy remains to be seen. But before going further, it is essential to clarify the concept: What is the Metaverse?

First and foremost, there is no single, unified Metaverse yet. At present, the Metaverse can be summed up as a collection of interconnected, virtual worlds that can be utilized for various purposes, including entertainment, trade, and work. Moreover, thanks to Web 4.0, the Metaverse is the next-generation Internet: its norm will be three-dimensional avatars similar to those in video games like Fortnite[12] and Roblox,[13] rather than a Web browser.[14] As such, the Metaverse can be considered a combination of virtual reality and massively multiplayer online (MMO) games in the most general sense. A metaverse universe can be defined as a virtual world where multiple users can interact simultaneously. Just as they can in the physical world,[15] in the Metaverse, users can engage in many activities, such as grocery shopping, participating in live concerts and sports activities, watching movies and theaters, visiting museums, establishing company collaborations, and working full-time jobs.[16]

Since the MMO genre is involved, many would compare the Metaverse's impact with that of the popular MMO, Second Life, a kind of pre-Metaverse VR universe, developed by Linden Lab in 2003. However, unlike previous virtual universe experiments such as Second Life, the Metaverse will be built on a simulated[17] rather than simple virtual reality.[18] Because the Metaverse is not a shadow of the physical world,[19] it is envisaged as a complementary element in constant interaction with the physical world. Of course, this continuous interaction can only be achieved with the availability of hardware infrastructure. Augmented reality (AR) glasses and virtual reality (VR) helmets are the minimum necessary hardware required for users to interact in the Metaverse habitat.
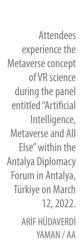
In addition to these more familiar gadgets, artificial skin is set to be produced. First, it's designed for robots; they will be able to 'feel' with the help of synthetic 'skin' to be built with ReSkin[20] technology developed jointly by Meta Platforms (*Facebook*) and Carnegie Mellon University.[21] Considering Meta Platforms' interest in the Metaverse, the next step may be to develop and offer a tool, for example, a glove or wearable technology product) to the end-user, just like augmented reality glasses and virtual reality helmets. In this way, users will gain the sense of touch along with sight and hearing in the Metaverse. This new technology will make the interaction between the Metaverse and the physical world even more robust and seamless.[22]

In the Metaverse, as it is currently envisioned, individuals will be free from the limits of time and space as we understand them today. For instance, people living in rural areas can work in cities integrated into the Metaverse platform virtually, without migrating to big cities.[23] In this context, it can be said that Metaverse has the potential to bring an end to work-based migration. Several countries have already started to develop the infrastructure necessary to integrate the metropolises of the world, such as Seoul, into the Metaverse universe. In early 2022, the South Korean government announced that it had allocated a budget of KRW 3.9 billion (about €2.8 billion) to be included in the Metaverse platform to achieve the "Seoul Vision 2030" target.[24] It is working with local IT companies to build virtual environments where *Hallyu* popular culture can be consumed through the Metaverse.[25] To give just a glimpse of the vast potential of the Metaverse as a site of cultural transmission (think, soft power), 80,000 people visited South Korea's Podo Museum within a month of its integration into the Metaverse platform. Similarly, more than 46 million users attended a virtual fan event held in the Metaverse, to obtain digital autographs from Blackpink, a South Korean K-Pop group.[26]

According to the research firm Strategy Analytics, as part of the increasing interest in virtual spaces for business and entertainment during the COVID-19 pandemic, the global Metaverse market's capacity, which was $6 billion last year, is expected to increase to approximately $42 billion by 2026.[27] In addition to cities, individual examples also reveal the economic dimension of the Metaverse; for instance, a Singaporean buyer purchased Mike Winkelmann's crypto art NFT for $69 million at a 2021 Metaverse auction.[28] The crypto asset management firm Grayscale estimates the Metaverse is "a trillion-dollar revenue opportunity."[29]

From Digital Diplomacy to Metaverse Diplomacy: The Case of Barbados

The use of digital diplomacy, defined as the use of social media for diplomatic objectives, may alter how diplomats manage information, public diplomacy, strategy development, international negotiations, and even crisis management.[30] Since social media usage is the core of digital diplomacy, it's essential to shed light on current social media user numbers. According to the Digital 2022 Global Overview Report,[31] published in partnership with We Are Social and Hootsuite, there are currently 4.95 billion active internet users; 4.62 billion of them are active social media users. In other words, 58.4 percent of the world's population are social media users. Moreover, the report indicates that those numbers will continue to increase; it anticipates a 10.1 percent yearly growth in social media usage,[32] which means 424 million new social media users every year. Given these huge numbers and the growth envisioned, digital diplomacy is not only a cost-effective type of public diplomacy but may

Attendees experience the Metaverse concept of VR science during the panel entitled "Artificial Intelligence, Metaverse and All Else" within the Antalya Diplomacy Forum in Antalya, Türkiye on March 12, 2022.

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serve a broader function in managing global change.[33] Thus, smaller countries' usage of digital diplomacy should not be minimalized from a fund-sufficient perspective but maximized as evidence of their desire to be part of the change in the international system. In this sense, Barbados's initiative to open up the world's first embassy in the Metaverse is spectacular.

Barbados is by no means the first country to engage in digitalized diplomacy. On May 22, 2007, Maldives became the first state to open an embassy in the MMO game Second Life. In its virtual embassy, a "virtual ambassador," managed by artificial intelligence, welcomes visitors and provides general information about visa applications, trade procedures, and other cultural issues regarding the country.[34] Sweden was the second state to open an embassy in Second Life, followed by Estonia, Colombia, Serbia, North Macedonia, the Philippines, Albania, and Malta.[35] The embassies in the Second Life were based on simple computer programs, like the question-answering bots used on many Internet pages today.[36] These countries were pioneers in this context in the mid-2000s when technological developments and opportunities were less advanced than they are today, and most of the world had not yet discovered social media. Those attempts reflect these states' aims to reposition themselves within the international system. Thanks to today's technological infrastructure, the Metaverse will provide the opportunity to communicate with real people,[37] not just a computer program. The Metaverse differs from its predecessors by bringing the features of interaction of the physical world into the virtual universe –this is the trademark of the Metaverse.

At its height of popularity, 2007-2008, the virtual universe of Second Life had more than 6 million unique users; these users could interact there through avatars, engage in educational and social activities individually and in groups, and trade virtual properties and services. More than 60 universities have established virtual campuses there,[38] including Denmark's Aarhus Business College, Harvard University, Newcastle University, Sheffield Hallam University, Stanford University, Edinburgh University, and Virginia Tech; many companies and media organizations have also been established in Second Life.[39]

The Metaverse differs from its predecessors by bringing the features of interaction of the physical world into the virtual universe

A more recently developed metaverse universe, Decentraland (released in 2020), has grown quite popular due to multi-million dollar investments and NFT sales. Many famous clothing companies, such as Gucci, Christian Dior, and Ralph Lauren are sold there, and favorite artists give live concerts.[40] In just one example, a Canadian investment company purchased land for $2.5 million and announced that it would build its general directorate in Decentraland.[41]

Barbados plans to open its first Metaverse embassy in Decentraland;[42] however, the government is reportedly finalizing agreements with other Metaverse platforms as well, such as Somnium Space and SuperWorld.[43] Gabriel Abed, Barbados' Ambassador to the United Arab Emirates (UAE) and the person responsible for opening the Barbados Embassy in the Metaverse, said, "The Metaverse Embassy of Barbados will be at the center of activities to advance the growth of stronger bilateral relations with governments globally."[44] However, it will be possible for Barbados to reach this goal only if other states also open diplomatic missions on the Metaverse. Barbados has 18 physical diplomatic missions worldwide and has officially established diplomatic relations with 105 of the world's 195 countries.[45] Perhaps Barbados aims to communicate with the rest of the world through the Metaverse Embassy. Regarding the Metaverse Embassy, Ambassador Abed stated: "E-consulate services will be a core feature of the (diplomatic) mission… as a gesture of diplomatic unification between technology platforms, a virtual teleporter connecting all Metaverse universes will be set up at the Barbados Metaverse Embassy."[46] Barbados' initiative to open an embassy is an essential point for the future of the Metaverse. Because as mentioned above, there is not a single global/unified Metaverse at the moment. In this context, it can be thought that states should open separate embassies for each metaverse universe. It can be predicted that individual users in these different metaverses will visit other universes through embassies' virtual teleporters, as Ambassador Abad suggests.

The Metaverse has the potential to be utilized as an orientation tool for diplomats, allowing them to study and learn about the customs and traditions of the nations to which they will be dispatched

Thanks to the Metaverse, small countries such as Barbados, which have limited resources, will be able to thrive by doubling their size and economy in the virtual plane. Indeed, Ambassador Abed said, "We cannot economically support 197 diplomatic missions worldwide… we realize we're an island of 166 square miles –we're small– but in the Metaverse, we're as big as America or Germany."[47] As a small island state with a population of only 300,000, Barbados' initiative to develop diplomatic relations with the world by opening an embassy in the Metaverse is an essential step. This initiative is likely to start a trend, particularly for small countries such as Malta, the Bahamas, Bermuda, and Cambodia. States familiar with the cryptocurrency and NFT process, such as El Salvador, where Bitcoin is accepted as an official currency,[48] are also likely to join.

Metaverse Diplomacy: Opportunities and Risks

The concept of the Metaverse in diplomacy raises some critical questions yet to be answered. First and foremost, will governments support or oppose the Metaverse vision? As mentioned above, Barbados' initiative is a spectacular attempt to develop diplomatic ties with the rest of the world. But this initiative can only be successful if the rest of the world takes this initiative too. Will governments work to establish their own metaverse universes, which they can control in terms of content, legislation, trade, and user surveillance? If each one builds its own Metaverse, it might cause the eruption of splinterverses,[49] which will eventually entail the isolation of that country in their small metaverse universe. Splinterverses, a disjointed assortment of internet structures isolated from the world, can be formed in the style of the Splinternet.[50] In this context, the aim of connecting the virtual and physical world through interaction globally, which is the promise of the Metaverse, will be in vain. And if governments simply sidestep the question, take no action, and have no stake in the Metaverse, this failure to interact might cause other problems, such as companies' monopolization of the metaverse universes.

Another critical question is, what international laws would the Metaverse necessitate? What new censorship guidelines and new taxation regulations would need to be established for virtual activities? Will virtual crimes be prosecuted in the physical realm, the virtual realm –or both? In a scenario where virtual crimes[51] occur in the Metaverse, will the trial and punishment

remain only on the virtual plane? Similarly, will physical agreements made in the Metaverse be carried over to the virtual world and vice versa? Separating the virtual and physical realms of existence and matching legislation to each plane will be difficult, as the virtual-real distinction will vanish in the Metaverse. What impact will the questions above have on international relations?

Furthermore, what will be the legal posture of a country whose historical areas, monuments, or government institutions are located on Metaverse land purchased and sold by non-citizens via NFT? Which legal punishments will be used to protect Metaverse users' intellectual property rights, and how will they be protected? As may be observed, the Metaverse legal architecture has not yet been clarified. Without legislation, a structure such as the Metaverse with global implications can exacerbate international conflicts and impasses. Clearly, many questions regarding the Metaverse are yet to be answered.

Although some of the questions raised above are cause for concern, the Metaverse is likely to affect the field of diplomacy positively thanks to the diplomatic missions to be opened on the Metaverse platform.[52] For instance, the Metaverse will make it easier for countries to negotiate, particularly given the constraints of the (post?) COVID-19 pandemic era. Diplomats worldwide will be able to meet virtually and conduct negotiations more efficiently. Another advantage of the Metaverse is that it may be utilized as a quick rendezvous point in cases of crisis diplomacy. On such a platform, where diplomats may meet as soon as possible to prevent an issue from developing, quick and effective crisis management will be possible.[53]

The Metaverse also has the potential to be utilized as an orientation tool for diplomats, allowing them to study and learn about the customs and traditions of the nations to which they will be dispatched. The expenses incurred by the physical embassy will no longer be included in the country's budget.[54] For instance, the Ambassador of Barbados, Abed, the man behind Barbados' digital-diplomacy push, explains that the construction of Barbados' diplomatic compound is expected to cost between $5,000 and $50,000, but a 'five-figure' grant from Decentraland is covering all costs.[55] "The cost is not too bad," he said; "It's a fraction of what a physical embassy costs."[56]

The Metaverse provides enormous opportunities for countries to conduct cultural diplomacy. A diplomat seeking the chance to learn about a country's cultural values can first visit that country through the Metaverse. The broader populous will have the same opportunities as well through virtual tourism. Governments have the opportunity to use the Metaverse as a site for cultural diplomacy through which to export their positive image to the international system.

President Erdoğan's declaration of the Metaverse as *Nevruz*, literally "new day," a Turkic world celebration held on the first day of spring, could serve as the impetus for creating a Turkic world-based metaverse: the Turkoverse

Moreover, as in the example of Barbados mentioned above, a small country in the physical world can be just as significant as any other country in the Metaverse universe. States can cultivate a positive perception through the attraction effect of their cultural values. Moreover, countries will have the opportunity to present their history and achievements to the international public through the Metaverse. For example, "history safaris" about countries' histories are already being held in the Decentraland universe.[57] Participants can experience historical events firsthand by going back to the past as if they were riding in a time machine. In this context, countries' past achievements and victories can be shared with the foreign public, through historical tours created under the control of the states. Similarly, it is possible to prevent slander and smear campaigns against countries through the successful usage of the Metaverse. However, such history tours, which any person could create in a Metaverse where states are not involved, may spread false information and prejudices about the target country. Thus, states' intervention in the Metaverse is crucial not only for its sake and future but for themselves as well.

State Sovereignty in the Metaverse

"State sovereignty" has always been a debated topic.[58] In a broad sense, state sovereignty itself and the question of how a state can enforce its sovereign powers in the Metaverse are areas of uncertainty yet to be clarified. For instance, in the physical world, when a country establishes an embassy in a foreign country, international agreements protect against interference by the host country's government.[59] These accords are predicated on the national government's control over their territory and access to it. The host state agrees not to exercise this power arbitrarily. In other words, the notion of sovereignty in terms of the laws governing how individuals and organizations may or may not behave on the territory of a given nation is critical in the diplomatic system. Sovereignty allows states to determine with whom they and their residents can conduct business, interact and establish relations. The relevance of this legal framework to the Metaverse is based on the fundamental view that NFTs are a new model of digital property.[60] In other words, much as a nation-state controls access to its territory, it is deemed the control authority over the private key storing the NFTs in its blockchain address. When a seller transfers an NFT to a buyer,[61] the buyer receives access to the digital property by incorporating it into his private

key. Let's apply this method to a state that controls access to digital properties on the Metaverse using a private key. This method is not the same as the absolute power of a state to use physical force against an enemy state. However, it does not differ from the ability of the host state to control the delegated, dependent powers acquired by a foreign embassy through diplomatic property rights and treaties.

One potential solution is a digital 'Peace of Westphalia' in which states acknowledge the Metaverse as a viable foundation for diplomacy and recognize each other diplomatically there. The Peace of Westphalia signed symbolically dated back to 1648, established the concept of the nation-state, which is the foundation of today's international order. It constitutes a mutual acknowledgment that a state has sovereign authority over its territory. For a digital Peace of Westphalia to prevail, states would have to set their geographical limits based on the virtual lands sold in the Metaverse and establish their sovereignty within this framework, in this context.

As mentioned above, there is no single or unified Metaverse yet. Consolidating all the metaverse universes into a single, global Metaverse will entail a long and challenging process requiring collaborations and agreements among many tech companies, content producers, and countries. Monopolization will be inevitable if this situation is completely limited to companies or a couple of governments. To avoid such an eventuality, heads of state and international organizations must be involved in the process in the early years of the Metaverse. It

will be an essential step for regional integrations (such as the European Union and ASEAN) and international organizations (such as NATO, the UN, and the OTS) to build their metaverse universes with the aim of a more expansive integration.

Metaverse Diplomacy and Türkiye: The Turkoverse

On January 17, 2022, Türkiye's ruling party, the Justice and Development Party (AK Party), held its inaugural meeting in the Metaverse. Turkish President Recep Tayyip Erdoğan directed his party to research the increasing utility of blockchain technology, notably Metaverse applications. "This is a delicate topic that should be looked at thoroughly," Erdoğan said of the Metaverse to AK Party officials.[62] President Erdoğan's instruction to start preparations for the Metaverse is an important step; Türkiye will develop foreign policy strategies to be a great state in the digital universe. Türkiye's efforts in this direction are based on studies conducted in prior years. For instance, the Digital Transformation Office has prepared and stated Türkiye's Artificial Intelligence Strategy.[63]

The next step in Türkiye's approach toward the Metaverse, "Forum Metaverse" was held at the ATO Congresium in Ankara on March 21, 2022.[64] Speaking at Forum Metaverse, President Recep Tayyip Erdoğan stated:[65]

> What truly matters in the digital world, as is the case in diplomacy, economy, and military, is your strength. We cannot sleep peacefully or look to the future confidently without developing our original technologies and software or producing original content… *Nevruz* means new day. We are here today to discuss and share our findings and proposals about Web 3.0, which we can call a new phase or the *Nevruz* of digital technologies and the Metaverse, the most popular media associated with it.[66]

President Erdoğan's declaration of the Metaverse as *Nevruz*, literally "new day," a Turkic world celebration held on the first day of spring, could serve as the impetus for creating a Turkic world-based metaverse: the Turkoverse. As previously indicated, metaverse universes based on regional integration rather than monopolization will become increasingly important in the Metaverse's future; as the OTS chair, Türkiye can take the lead in building a Turkoverse in which the member states of the OTS can interact.[67]

Physical distance is probably one of the most significant barriers to integration in the Turkic world, given the geographical distribution of the OTS countries. The Turkoverse will eliminate physical distance. It could help ensure the circulation of money and labor based on the Turkic World by integrating the capitals

and industrial cities into the Turkoverse, as South Korea has done. At first, capitals and metropolitan cities, such as Ankara, İstanbul, Almaty, Nur-Sultan, Baku, etc., would be integrated into the Turkoverse. Companies and individuals in such Turkoverse cities could create businesses, operate shops, and have full-time jobs. For example, a customer from Ankara will be able to visit and shop in a store in Almaty.

As the imminent norm for the World, the Metaverse will reign in the future

Similarly, an individual residing in Baku could work for a salary in a company in Bishkek through the Turkoverse. Of course, this situation would eliminate the need for the work-based internal migration of citizens of member countries who can perform remote tasks. By continuing their lives in the countryside, individuals will have the opportunity to work in big cities and even in cities of other countries connected through the Turkoverse. Joint Research and Development (R&D) projects and technological infrastructure development, once challenging due to physical distance, would be streamlined for member countries.

In terms of a standard OTS fiscal policy, a common cryptocurrency for use in commerce, production, and professional business, "Turko-coin,"[68] could be developed and accepted as the formal common currency of the Turkoverse. Thus, a common currency for the Turkic world would come into circulation, and an important step would be taken toward economic integration. In this context, the borders between the countries of the Turkic world both in financial and commercial terms would disappear, and physical distance based on geography would no longer be an issue between countries.

With the higher education institutions of the countries of the Turkic World opening campuses in the Turkoverse, coordination in higher education will also be possible. Turkic world higher education mobility projects, pioneered by the Orhun Exchange Program and carried out by the Turkic Council, will strongly come into force in the Turkoverse. In addition, student diversity will be enhanced and mobility among member countries will become more active since students will be able to receive education within the Turkoverse via digital campuses without leaving their homelands. Similarly, it will be possible for instructors to give lectures at other universities in the Turkoverse without leaving their home city. Expanded interactions will be ensured in all aspects of education and training. And it will be possible to develop a standard curriculum by evaluating each education dimension at the high school and primary levels.

Similarly, students and teachers can engage in educational activities in different schools in different Turkic countries. Joint R&D studies, industry collab-

The Turkoverse vision has great potential not just for Türkiye but also for the future of the OTS as an international organization

orations, academic events, and technological horizon workshops among member countries can easily be carried out in the Turkoverse on a digital platform without the constraints of overcoming physical distance. In short, through the Metaverse, it is possible to formulate a unified vision for meta-education; Metaverse-powered online distance education[69] can be conducted in the Turkoverse.

Perhaps the most important advantage of integrating OTS cities into metaverse universes will be the acceleration of cultural interaction between citizens of the various countries of the Turkic World. It is essential to ensure cultural integration and to carry out culture as a diplomacy activity to realize the 2040 vision of the Turkic world. The member states of the OTS, especially Türkiye, have cultural richness stemming from their history. At present, the cultural diplomacy activities of the Turkic world are being carried out successfully by the Turkish Academy, the Turkish Culture and Heritage Foundation, and TURKPA institutions, especially TURKSOY. The Turkoverse could expand these activities to become a center of attraction in other metaverse universes, thanks to the joint embassies to be opened to other metaverse universes within the Turkoverse, and the export of cultural diplomacy and a positive image of the Turkic world.[70]

Certain procedures must be performed to ensure the Turkoverse's continued operation: First, it is essential to establish a "Center of Strategic Futures" affiliated with the Chair of the OTS, as Singapore did.[71] This institution would provide states with the opportunity to systematically monitor the risks and opportunities that technological developments such as the Metaverse may pose in the near, medium, and long term. Hence, OTS will be able to meet the risks and opportunities by developing the necessary strategies for the future of the Turkoverse. Horizon workshops to predict technological developments in the Metaverse and beyond can be organized with experts from academia and the private sector. Last but not least, the most crucial thing is for OTS member states to work together to build preventative and rule-making regulations for the Turkoverse. The best way to solve future problems will be through regulatory decisions made in advance.

Conclusion

Since the Metaverse has surged to the top of the global agenda, there has been an ongoing discussion regarding the Metaverse and its promised future. Some views concentrate on its decentralized nature and the potential for a brand-

new space for freedom of speech and act. Others approach the Metaverse vision from a state perspective and consider it a new norm, conceptualizing such things as a digitalized Westphalia treaty for countries. Of course, these visions are divided as to whether there should be a single, unified Metaverse or a multitude of metaverses. Other questions are circulating too, such as whether states shall interfere or let the Metaverse space exist for companies. But all of those different voices unite around one idea: the Metaverse is the next big thing.

Globalization is frequently depicted as the world becoming a gigantic, borderless village.[72] As the imminent norm for the World, the Metaverse will reign in the future. Still, suppose no state actors define the Metaverse age. In that case, the Metaverse-driven World could end up like the island in Lord of the Flies, with no authority but immaturity-driven brutality. No state presence might eventually mean no law enforcement or regulations in the Metaverse. So, it has the potential to become a haven for illegal groups to engage in money laundering and countless other illegal activities. States must take a role in designing the Metaverse's future to prevent such cybercrimes to happen. Because the future belongs to the one who designed it. Hence 2022's Antalya Diplomacy Forum's theme was "Recoding the Diplomacy", Türkiye's quest for Metaverse diplomacy is highly appropriate and President Recep Tayyip Erdogan's directive to begin Metaverse preparations is a significant step forward in Türkiye's desire to shape the Metaverse's future. As the *Nevruz* of digitalization, in President Erdoğan's words, Türkiye has the capacity for building up the Turkoverse based on the OTS. By means of the Turkoverse, geographical distance will be eliminated, first by integrating the capitals and major cities of member states into this structure in the first stage. The free movement of labor and money among OTS members will be possible through the Turkoverse. In addition, the Orhun Student Exchange Program, founded in recent years, can be carried out more effectively with university campuses to be opened in the Turkoverse. Joint R&D studies, industry collaborations, academic events, and technological horizon workshops among member countries can take place on a virtual platform in the Turkoverse without the limitation of physical distance. As a result, a common Turko-coin currency, standardized education-training curriculum, and coordinated R&D research may be viable in a world where borders and physical distance are no longer an issue. As a future vision, the Turkoverse also has the potential to become a magnet for other Metaverse universes, according to the Turkic World's cultural diplomacy activities. Yet is the technical capacity of the OTS member states adequate to transform the Turkoverse into reality? Since this is a future vision of the direction of an emerging global trend, OTS members should focus on the opportunity to construct such a Metaverse universe and increase their capacity to do so accordingly. Ultimately, by building and activating the Turkoverse, Türkiye not only has the chance to design the future of the Metaverse but the opportunity to protect itself and the OTS from

the uncertainties of the Metaverse future. Thus, the Turkoverse vision has great potential not just for Türkiye but also for the future of the OTS as an international organization. ●

Endnotes

1. Yishan Wong, *Twitter*, 3:10 PM, (April 15, 2022), retrieved from https://twitter.com/yishan/status/1514939157931454466.

2. "Cryptocurrency Regulations by Country," *Thomson Reuters*, 2022, retrieved April 20, 2022, from https://www.thomsonreuters.com/en-us/posts/wp-content/uploads/sites/20/2022/04/Cryptos-Report-Compendium-2022.pdf.

3. Neal Stephenson, *Snow Crash*, (New York: Bantam Books, 1992), pp. 19, 28.

4. Ernest Cline, *Ready Player One*, (New York: Crown Publishing Group, 2011).

5. Metaverse, *Lexico English Dictionary*, April 17, 2022, retrieved from https://www.lexico.com/definition/metaverse.

6. In this article, the term 'Metaverse' will be used to refer to the concept of a single, unified VR universe (which is currently just a theory, the production of which is at various stages of technological development), and the term 'metaverse' or 'metaverse universe' will be used to describe various 3D, VR worlds that could be connected into a larger whole. The Turkoverse proposed in this article is an example of a potential metaverse universe.

7. Kari Paul, "Facebook Announces Name Change to Meta in a Rebranding Effort," *The Guardian*, (October 28, 2021), retrieved April 17, 2022, from https://www.theguardian.com/technology/2021/oct/28/facebook-name-change-rebrand-meta.

8. For a study that reviews articles written on the Metaverse subject, please see, Nida Gökçe Narin, "A Content Analysis of the Metaverse Articles," *Journal of Metaverse*, (2021), Vol. 1, No. 1, pp. 17-24.

9. There are such events going on the Metaverse platform, for instance, "Walk in Joseon! (Metaverse History Tour)," *One More Trip*, retrieved (September 22, 2022), from https://www.onemoretrip.net/goods/walk-in-joseon-metaverse-history-tour/#none; *Decentraland*, (May 5, 2022), retrieved from https://events.decentraland.org/.

10. "How to Address Digital Safety in the Metaverse," *World Economic Forum*, (January 14, 2022), retrieved September 22, 2022, from https://www.weforum.org/agenda/2022/01/metaverse-risks-challenges-digital-safety/.

11. "Gartner Predicts 25% of People Will Spend at Least One Hour per Day in the Metaverse by 2026," *Gartner*, (February 7, 2022), retrieved September 22, 2022, from https://www.gartner.com/en/newsroom/press-releases/2022-02-07-gartner-predicts-25-percent-of-people-will-spend-at-least-one-hour-per-day-in-the-metaverse-by-2026.

12. For more information, please visit the official website retrieved from https://www.epicgames.com/fortnite/tr/home.

13. For more information, please visit the official website retrieved from https://www.roblox.com.

14. Rizwan Virk, "The Metaverse Is Coming: We May Already Be in It," *Scientific American*, (February 22, 2022), retrieved April 18, 2022, from https://www.scientificamerican.com/article/the-metaverse-is-coming-we-may-already-be-in-it/.

15. One can ask what makes the Metaverse version of these activities different/unique? Considering visiting Eiffel Tower and having a view of Paris on top of it, after the visit, you can go shopping at Louis Vuitton to see the new season's products. Thanks to VR headsets and ReSkin-like wearable technologies, users can see by their eyes, hear by their ears, touch by their fingertips, and near future, even smelling can be possible. In other words, it's not and will not be the same to look at a computer screen to visit websites and do those activities compared to Metaverse by future optimized VR headsets and other wearable technologies.

16. Mark Purdy, "How the Metaverse Could Change Work," *Harvard Business Review*, (April 5, 2022), retrieved April 18, 2022, from https://hbr.org/2022/04/how-the-metaverse-could-change-work.

17. The idea of simulated reality holds that reality could be reproduced to a degree that it cannot be distinguished from actual reality. It may contain conscious beings who are either aware or unaware that they are living in a simulation. Compared to the current, technologically feasible concept of virtual reality, which can be easily distinguished from the actual experience of reality, this is vastly different. In contrast, it would be difficult or impossible to differentiate between actual reality and simulated reality. For further read, see, David Deutsch, *The Fabric of Reality*, (Penguin, 1998).

18. "The Metaverse and Its Impact on International Relations: A Summary," *Exploring Digital Diplomacy*, (November 20, 2021), retrieved April 19, 2022, from https://digdipblog.com/2021/11/20/the-metaverse-and-its-impact-on-international-relations-a-summary/#:~:text=The%20Metaverse%20will%20not%20be,intersect%20the%20physical%20world%20constantly.

19. Digital transformation enhanced by the COVID-19 pandemic aroused new approaches in many areas such as marketing. One of the unique approaches is Phygital. The term can be defined as the combination of physical plus digital is a marketing term that describes blending digital experiences with physical and many brands have started to adapt themselves to this new kind of approach in the market. Now taking consideration the term into the Metaverse, which is not a shadow of the physical world, it is the paramount platform for the phygital to be implemented. For more about Phygital, see, Paul Prior, "Phygital: What Is It and Why Should I Care?" *Forbes*, (June 30, 2021), retrieved September 20, 2022, from https://www.forbes.com/sites/forbesbusinesscouncil/2021/06/30/phygital---what-is-it-and-why-should-i-care/?sh=67b41557587a.

20. For more information, please visit the official website: https://www.reskin.eu/.

21. Aaron Aupperlee, "ReSkin Could Help Researchers Discover a Sense of Touch," *Carnegie Mellon University News*, (November 19, 2021), retrieved April 18, 2022, from https://www.cmu.edu/news/stories/archives/2021/november/reskin.html#:~:text=Called%20ReSkin%2C%20the%20technology%20is,to%20apply%20as%20a%20bandage.

22. Erman Akıllı, "Diplomaside Dijital Dönüşüm ve Metaverse," *Sabah*, (February 5, 2022), retrieved April 20, 2022, from https://www.sabah.com.tr/yazarlar/perspektif/erman-akilli/2022/02/05/diplomaside-dijital-donusum-ve-metaverse.

23. Samreen Sadiya, "Humans Emerging beyond Universe with Metaverse, Is It Possible? How?" *International Journal for Research in Applied Science & Engineering Technology (IJRASET),* Vol. 10, No. 1 (January 2022), pp. 1482-1483.

24. "Seoul, First Local Gov't to Start New-Concept Public Service with "Metaverse Platform," *Seoul Metropolitan Government*, (November 8, 2021), retrieved April 20, 2022, from https://english.seoul.go.kr/seoul-first-local-govt-to-start-new-concept-public-service-with-metaverse-platform/.

25. Sang Kim, "South Korea's Approach to the Metaverse," *The Diplomat*, (November 2, 2021), retrieved April 20, 2022, from https://thediplomat.com/2021/11/south-koreas-approach-to-the-metaverse/.

26. Tamar Herman, "K-Pop Labels Embrace Virtual Stars and Pursue Metaverses to Extend Their Artists' Online Reach," *South China Morning Post*, (November 5, 2021), retrieved April 20, 2022, from https://www.scmp.com/lifestyle/k-pop/article/3154968/k-pop-labels-embrace-virtual-stars-and-pursue-metaverses-extend.

27. David MacQueen, "Consumer XR Metaverse Content Forecast 2014-2026 Dec 2021 Update," *Strategic Analysis*, (December 23, 2021), retrieved April 20, 2022, from https://www.strategyanalytics.com/access-services/media-and-services/metaverse-augmented-and-virtual-reality/reports/report-detail/consumer-xr-metaverse-content-forecast-2014-2026-dec-2021-update?slid=2167937&spg=10.

28. Josie Thaddeus-Johns, "What Are NFTs, Anyway? One Just Sold for $69 Million," *The New York Times*, (March 11, 2021), retrieved April 21, 2022, from https://www.nytimes.com/2021/03/11/arts/design/what-is-an-nft.html#:~:text=Christie's%20Images%20Ltd.&text=The%20artist%20Mike%20Winkelmann%2C%20also,achieved%20by%20a%20living%20artist.

29. Harry Robertson, "The Metaverse Is a $1 Trillion Opportunity, Crypto Giant Grayscale Says, as Virtual Land Sales Boom," *Markets Insider*, (November 25, 2021) retrieved April 25, 2022, from https://markets.

businessinsider.com/news/currencies/metaverse-1-trillion-opportunity-grayscale-virual-land-sales-de-centraland-2021-11#:~:text=Crypto%20giant%20Grayscale%20said%20the,crypto%20world%2C%20with%20investment%20accelerating.

30. Corneliu Bjola, "Introduction: Making Sense of Digital Diplomacy," in Corneliu Bjola and Marcus Holmes (eds.), *Digital Diplomacy: Theory and Practice*, (London: Routledge, 2015), p. 4.

31. Simon Kempy, "Digital 2022: Global Overview Report," *Datareportal*, (January 26, 2022), retrieved April 25, 2022, from https://datareportal.com/reports/digital-2022-global-overview-report, p. 9.

32. Kempy, "Digital 2022," p. 10.

33. Marcus Holmes, "Digital Diplomacy and International Change Management," in Bjola and Holmes (Eds.) *Digital Diplomacy*, pp. 14-15.

34. "Maldives Unveils World's First Virtual Embassy," *DiploFoundation*, (May 22, 2007), retrieved April 25, 2022, from http://archive1.diplomacy.edu/pool/fileInline.php?idpool=463.

35. "Virtual Embassies in the Age of Digital Diplomacy," *Exploring Digital Diplomacy,* (June 25, 2014), retrieved April 25, 2022, from https://digdipblog.com/2014/06/25/on-virtual-embassies-in-the-age-of-digital-diplomacy/.

36. "Virtual Embassies in the Age of Digital Diplomacy."

37. Today technology allows us to communicate with real people online in real-time in various ways. Still, this section it's aimed to shed light on the comparison between formal digital embassy experiences of the countries. Moreover, thanks to the Metaverse, people will interact through a digital representation, see each other through their avatars, and interact orally and visually instead of with chat bubbles on web pages.

38. See, "Universities in Second Life," retrieved April 25, 2022, from https://secondlife.com/destinations/learning/universities.

39. See "Shopping Events in Second Life," retrieved April 25, 2022, from https://secondlife.com/destinations/shopping_events.

40. Mark Ellwood, "Luxury Brands Are Already Making Millions in the Metaverse," *Bloomberg*, (December 9, 2021), retrieved April 25, 2022, from https://www.bloomberg.com/news/articles/2021-12-09/luxury-fashion-brands-are-already-making-millions-in-the-metaverse.

41. Nelson Aguilar, "Someone Just Bought Virtual Land for $2.5 Million," *CNET*, (November 24, 2021), retrieved April 25, 2022, from https://www.cnet.com/personal-finance/someone-just-bought-virtual-land-for-2-5m/.

42. Jim Wyss, "Barbados Is Opening a Diplomatic Embassy in the Metaverse," *Bloomberg*, (December 14, 2021), retrieved April 25, 2022, from https://www.bloomberg.com/news/articles/2021-12-14/barbados-tries-digital-diplomacy-with-planned-metaverse-embassy.

43. Andrew Thurman, "Barbados to Become First Sovereign Nation with an Embassy in the Metaverse," *Yahoo! Finance*, (November 15, 2021), retrieved April 25, 2022, from https://finance.yahoo.com/news/barbados-become-first-sovereign-nation-110000022.html?guccounter=1&guce_referrer=aHR0cHM-6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAMBU5TjlRDB3pxq-KaBFlLI5Af1Rejv1Ly2G-dvwbGqp6bgAGQE1XrPncAmbaPefVTIwg0xAKM76d0FfyW2q2hSL7VwLkdgE7X4pYvnZwr8w7UpX-LpTSBYNuFKsgRP0v5t8ow_p4t_fHXiZ4EuxPC9qTx_CHeMGsqRC0XrcRiF4KO.

44. Wyss, "Barbados Is Opening a Diplomatic Embassy in the Metaverse."

45. "Barbados to Establish World's First Metaverse Embassy," *TRT World*, (November 19, 2021), retrieved May 5, 2022, from https://www.trtworld.com/magazine/barbados-to-establish-world-s-first-metaverse-embassy-51836.

46. Will Gottsegen, "What Will a Metaverse Embassy Look Like?" *Coindesk*, (November 15, 2021), retrieved May 5, 2022, from https://www.coindesk.com/business/2021/11/15/what-will-a-metaverse-embassy-look-like/.

47. Carol R. H. Malasig, "Diplomacy in the Metaverse: Will It Work?" *Manila Bulletin*, (February 1, 2022), retrieved May 5, 2022, from https://mb.com.ph/2022/02/01/diplomacy-in-the-metaverse-will-it-work/

48. Oscar Lopez and Ephrat Livni, "In Global First, El Salvador Adopts Bitcoin as Currency," *The New York Times*, (September 7, 2021), retrieved May 5, 2022, from https://www.nytimes.com/2021/09/07/world/americas/el-salvador-bitcoin.html.

49. The term splinternet refers to the Internet's division and splintering due to several things, including technology, business, politics, nationalism, religion, and different national interests. Applying this term to Metaverse, "splinterverse" would eventually become a reality if there is a strict division of Metaverse universes ruled by a single country. The splinterverse will expand as more countries begin to rule isolated Metaverses to censor material, and eventually, it will threaten public trust, global division, and governmental authority.

50. The Splinternet is the outcome of geopolitical rivalry, mainly between China and the U.S. See, "What is the "Splinternet?" *The Economist*, (November 22, 2016), retrieved May 5, 2022, from https://www.economist.com/the-economist-explains/2016/11/22/what-is-the-splinternet.

51. Personal information, identity, and credit card theft can occur on the Metaverse. More importantly, children could be particularly vulnerable to crime, including theft of virtual assets or sexual and racial harassment in the Metaverse. For more on this topic, see, "Crime in the Metaverse Is Very Real. But How Do We Police a World with No Borders or Bodies?" *World Economic Forum*, (August 18, 2022), retrieved September 20, 2022, from https://www.weforum.org/agenda/2022/08/crime-punishment-metaverse/.

52. Ilan Manor, "The Metaverse and Its Impact on Public Diplomacy," *USC Center on Public Diplomacy*, (February 23, 2022) retrieved April 25, 2022, from https://uscpublicdiplomacy.org/blog/metaverse-and-its-impact-public-diplomacy.

53. Manor, "The Metaverse and Its Impact on Public Diplomacy."

54. Akıllı, "Diplomaside Dijital Dönüşüm ve Metaverse."

55. Jim Wyss, "Barbados Is Opening a Diplomatic Embassy in the Metaverse."

56. "Barbados Is Opening a Diplomatic Embassy in the Metaverse," *The Seattle Times*, (December 20, 2021) retrieved April 25, 2022, from https://www.seattletimes.com/business/barbados-is-opening-a-diplomatic-embassy-in-the-metaverse/.

57. See, *Decentraland*, (May 5, 2022), retrieved from https://events.decentraland.org/.

58. See, Burak Güneş, "Egemenlik ve İnsancıl Müdahale: Çelişkili Bir Kuram Olarak Uluslararası Hukuk," *Güvenlik Bilimleri Dergisi*, Vol. 10, No. 1 (2021), pp. 31-58.

59. "Vienna Convention on Diplomatic Relations," *United Nations*, (April 18, 1961), retrieved May 5, 2022, from https://legal.un.org/ilc/texts/instruments/english/conventions/9_1_1961.pdf.

60. Saeed Banaeian Far and Azadeh Imani Rad, "Applying Digital Twins in Metaverse: User Interface, Security and Privacy Challenges," *Journal of Metaverse*, Vol. 2, No. 1 (2022), p. 14.

61. Robyn Conti and John Schmidt, "What Is An NFT? Non-Fungible Tokens Explained," *Forbes*, (April 8, 2022), retrieved May 5, 2022, from https://www.forbes.com/advisor/investing/cryptocurrency/nft-non-fungible-token/.

62. "Erdoğan Instructs AK Party to Organize Forum on Metaverse," *Daily Sabah*, (January 26, 2022), retrieved May 5, 2022, from https://www.dailysabah.com/politics/erdogan-instructs-ak-party-to-organize-forum-on-metaverse/news.

63. "Türkiye's First Artificial Intelligence Strategy," *Presidency of the Republic of Turkiye Digital Transformation Office*, (August 20, 2021), retrieved May 5, 2022, from https://cbddo.gov.tr/en/news/6135/turkiye-nin-ilk-yapay-zeka-stratejisi.

64. Recep Tayyip Erdoğan, "We Cannot Look to the Future with Confidence Without Developing Our Original Technologies, Software," *Presidency of the Republic of Türkiye*, (March 21, 2022), retrieved May 5, 2022, from https://www.tccb.gov.tr/en/news/542/136172/-we-cannot-look-to-the-future-with-confidence-without-developing-our-original-technologies-software-.

65. Erdoğan, "We Cannot Look to the Future with Confidence Without Developing Our Original Technologies, Software."

66. Erdoğan, "We Cannot Look to the Future With Confidence Without Developing Our Original Technologies, Software."

67. For more information, see, *Organization of Turkic States*, (May 5, 2022), retrieved from https://www.turkkon.org/en/uye-ulkeler.

68. Even European Union (EU) is taking steps towards digital currency; it's essential for OTS to create a common formal cryptocurrency based on Turkoverse. For more about the EU's digital euro initiative, see, "A Digital Euro," *European Central Bank*, retrieved September 22, 2022, from https://www.ecb.europa.eu/paym/digital_euro/html/index.en.html.

69. Stylianos Mystakidis, "Metaverse," *Encyclopedia 2022*, Vol. 2, (2022), p. 486.

70. Erman Akıllı, "Türk Dünyasında Dijital Bütünleşme: "Turkoverse," *Kriter Dergi*, (March 1, 2022), retrieved May 5, 2022, from https://kriterdergi.com/dis-politika/turk-dunyasinda-dijital-butunlesme-turkoverse.

71. CSF's mission is to position the Singapore government to navigate emerging strategic challenges and harness potential opportunities by building capacities, mindsets, expertise, and tools for strategic anticipation and risk management; developing insights into future trends, discontinuities, and strategic surprises; and communicating insights to decision-makers for informed policy planning. For more information, see, *Centre for Strategic Futures*, retrieved May 5, 2022, from https://www.csf.gov.sg/.

72. Kürşat Kan, "Globalleşmenin Uluslararası İlişkilere Etkileri," *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, Vol. 13, No. 20 (2011), pp. 1-10.