

Metaverse, a Technology-driven Opportunity to Kantian Culture

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Abstract

Constructivists classify international relations into Hobbesian, Lockean, and Kantian cultures. To realize the collective identity of Kantian culture, their theories give a theoretical mechanism with three levels and four variables. Interdependence, common fate, homogeneity, and self-restraint (trust). And if trust is combined with any one of the active causes, there is the possibility of achieving Kantian culture. Although Kantian culture is tempting, constructivists do not give a specific method for empirical practice.

This paper argues that as a combination of cutting-edge technologies and a fusion of virtual and real, Metaverse may become a technology-based opportunity to realize friendly peace. This paper infers that the Metaverse can achieve homogeneity at the individual and group levels and build broad trust in mechanism and process, organization, and wide scope. Thus, Metaverse fits the constructivist theoretical model. Finally, this paper shows three current relatively radical Metaverse cases.

Keywords: Metaverse, Constructivism, Trust, Identity, Kantian culture

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1 Introduction

Constructivism interprets global relations through an identity political standpoint. The different connection forms between the “agent” and the “structure” together with distinguished “common knowledge” or “shared ideas” will lead anarchy situations into different “Hobbesian, Lockean, or Kantian” cultures.¹ To Wendt’s description, these different cultures depend upon which political roles - enemy, rival, or friend - play the dominant position in the international system. He also elaborates four master variables or causal mechanisms - interdependence, common fate, homogeneity, and self-restraint - to construct a new defined and necessary in-group identity to go from the Lockean culture into the Kantian culture. However, even though Wendt gives an alternative and relevant notional pathway for human’s peaceful future, but he also recognizes there still doesn’t have the real example of Kantian culture and the implementation methods still need further study.²

This work agrees with Wendt’s “rump materialism” viewpoint to technology, one precondition of his theory. Indeed, as a constructivist, Wendt is labeled by emphasizing ideas, but he also stresses technologies' power of social change³. Therefore, this paper will follow this logic and discuss the possible influence of Metaverse, one of the most presented tech words in 2021, in international relations area. From my perspective, this technological breakthrough, the ultimate combination of AI, Blockchain, XR (Extended Reality), and Future Networks will radically reconstruct the pattern of our society and bring about one potential pathway to the Kantian culture.

¹ Wendt, Alexander. *Social theory of international politics*. Vol. 67. Cambridge University Press, 1999.

² Ibid, preface, XXX

³ Ibid, 111

2 Constructivism and Kantian culture

In this section, this paper firstly goes through Wendt's theory of constructivism, especially talking about his theoretical discussion of the implementation conditions of Kantian culture. Then, I review predecessors' research about their suggestions of how to move forward Kantian culture. However, most of such solutions are vague and unlikely to be achieved.

2.1 The features of Wendt's theory

After the publication of "Theory of International Politics", Waltz boosted realism theory into neorealism, which abandons Morgenthau's "human nature" and condenses the international relations into how the international structure will influence states' behaviors⁴. In Waltz's theory, anarchy is the research substrate and objective existence in this area. As its longtime counterpart, liberalism accepts the prerequisite of anarchy but asserts the international institutions play a more vital role to impact international politics. This most influential liberalism today is called neoliberal Institutionalism and signed by the publication of "After hegemony".⁵ However, because of the consensus of avoiding research on the state and the individual level, neorealism and neoliberalism both relatively ignore the effect of ideas, like identity, ideology, and culture, in IR area.⁶ Additionally, since setting rationalism and anarchy as the precondition⁷, no matter neorealist or neoliberal methods might not be able to establish the thorough global cooperation. Contrastively, although accepting the concept of anarchy, Wendt also inherits the "culture" from English School⁸ as the "common knowledge" or "shared ideas," which emerges from the interaction of members of society. He categorizes the international system into three different

⁴ Waltz, Kenneth N. "Theory of International Politics." (1979).

⁵ Keohane, Robert O., and Robert O. Keohane. *After hegemony*. Princeton university press, 2005.

⁶ Baldwin, David Allen. *Neorealism and neoliberalism: the contemporary debate*. Columbia Press, 1993.

⁷ Linklater, Andrew, and Hidemi Suganami. *The English school of international relations: a contemporary reassessment*. Vol. 102. Cambridge University Press, 2006.

⁸ Buzan, Barry. *The logic of anarchy*. Columbia University Press, 1993.

cultures: Hobbesian, Lockean, or Kantian. There have varying behavior patterns and role orientations when entities are placed in different cultural structures.

The Hobbesian culture⁹ is characterized by mutual hostility and killing, which means the relation of the interacting parties is “enemy.” It is a direct reflection of the zero-sum game and security dilemma. Under this culture, the only purpose of international actions is to destroy and annex each other. Therefore, each party takes a tough approach to change the status quo: war is the primary way to solve problems. In conclusion, international participants do not recognize the rights of others and limit their violence when seeking their own survival and interests. In the Lockean culture, participants neither see each other as enemies nor have the essential demand to destroy each other anymore because they recognize the rights to life, property, and sovereignty. In this relation, they cooperate and confront each other as the role of “rivals.” The constraints of international law, international organizations, and institutions guarantee security and survival and have made today's international relations an anarchic but orderly scenario. In short, the shared logic of “kill or be killed” has been replaced by “survive and let survive.”¹⁰ The last Kantian culture¹¹ is featured by friendship, in which participants do not use violence to resolve conflicts of interest. Moreover, the relation even surpasses states' interests and form a “pluralistic security community” that if a third party threatens a friend, the other sides will help, regardless of their own gains or losses. The fundamental bases of this culture are nonviolence, mutual aid, and Kant's idea of perpetual peace.¹²

⁹ Wendt. *Social theory*.259-263.

¹⁰ Ibid, 279-285

¹¹ Ibid, 297-306

¹² Kant, Immanuel. *Perpetual peace*. 1795.

2.2 The mechanisms of forwarding to Kantian culture

“Anarchy is what states make of it”¹³ can be explained as which culture will be dominant depending on the cultural consensus accepted and the mutual practices adopted by the interacting parties. Like his analysis of Hobbesian and Lockean culture, Wendt also claims there have three internalizing degrees (or pathways) of Kantian style cooperation, and four master variables¹⁴ determining the possibility and stability of the realization of this culture.

2.2.1 Three degrees of Kantian culture. The elementary degree is triggered by external and extremely emergency threats, like the destruction of the earth caused by extreme environmental deterioration or nuclear wars.¹⁵ Although participants will cooperate regardless of their interests because of security issues, this degree is exceedingly unstable. The second degree is operated through self-interest strategy, that participants can obtain more profit from the friendship than rival or war, hence will maintain to be friends. The most obvious difference to distinguish the second degree from the first one is there has no compelled force enforces participants to cooperate.¹⁶ However, self-interest strategy cannot guarantee to cultivate a “pluralistic security community” or “common identity” which is based on altruism to entire the third level of Kantian culture. Scholars from the game theory perspective have proofed that it’s not a zero-sum when consider the relations between altruism and helping oneself actions.¹⁷ Actually, altruistic strategy can help a group to grasp more benefits during the evolution than its

¹³ Wendt. *Social theory*. 313

¹⁴ Ibid. 253, 302, 343

¹⁵ Weigert, Andrew J. "Transverse interaction: A pragmatic perspective on environment as other." *Symbolic Interaction* 14, no. 3 (1991): 353-363.; Deudney, Daniel. "Dividing realism: Structural realism versus security materialism on nuclear security and proliferation." *Security Studies* 2, no. 3-4 (1993): 5-36.

¹⁶ Stein, Arthur A. "Coordination and collaboration: regimes in an anarchic world." *International organization* 36, no. 2 (1982): 299-324.

¹⁷ Gabriel, Allison S., Joel Koopman, Christopher C. Rosen, and Russell E. Johnson. "Helping others or helping oneself? An episodic examination of the behavioral consequences of helping at work." *Personnel Psychology* 71, no. 1 (2018): 85-107.

self-interested competitors.¹⁸ But in Wendt's argument, a "common identity" is not just an instrumental method, but more about the legitimacy or is the result of "identification with others."¹⁹

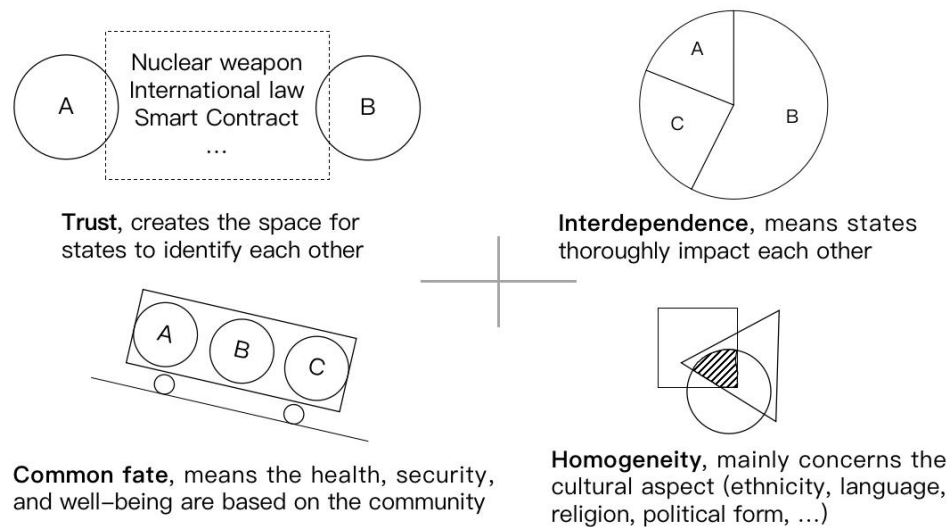


Figure 1. Four variables of Kantian culture

2.2.2 Four variables of Kantian culture. In order to achieve the ultimate degree of Kantian culture, Wendt proposes four causal mechanisms, which he calls "master variables" to assume how the society will format the "common identity" and forward the final Kantian culture (Figure 1).²⁰ Wendt categorizes these variables into two classifications. The first type includes **interdependence**, **common fate**, and **homogeneity** is called active or efficient causes, which can construct cooperation and friendship. The second type is named enabling causes and included only one variable, **self-restraint**. In a particular scenario, all four variables may be present, and their degrees are vital to forming the common identity. Additionally, only if there

¹⁸ Smith, John Maynard. "The origin of altruism." *Nature* 393, no. 6686 (1998): 639-640.; Hagen, Edward H., and Peter Hammerstein. "Game theory and human evolution: A critique of some recent interpretations of experimental games." *Theoretical population biology* 69, no. 3 (2006): 339-348.

¹⁹ Wendt. *Social theory*. 305

²⁰ Ibid, 342-363

have the presence of enabling variable combining any one of the active, can lead to the Kantian culture.²¹

2.3 Present approaches to Kantian culture

Even though Wendt's proponents mainly are interested in debating distinctions between constructivism and other schools²², some Constructivists' studies develop the theory in IR area by discussing its features and theoretical influences²³. Moreover, some works have attempted to seek the implementation approach to Kantian culture. Some of them study why and how specific adjacent counties or regions have dropped some realistic or liberalistic strategies during their foreign affairs and practice Kantian culture in their policies. Such as the European Union, the similar historical origins²⁴, and peaceful appeal due to the experience of WWII²⁵ afforded the cultural basement to construct the collective EU identity. In postwar Europe, the establishment of some financial orientated organizations, like the European Coal and Steel Community (ECSC,1951) and European Economic Community (EEC,1957) initially changed European countries' view of sovereignty.²⁶ They finally facilitated a deeper and wider regional cooperation in the monetary and political area.²⁷ Moreover, the fall of the Berlin Wall and the emerging crisis like refugee issue label the change from the traditional security frame²⁸ to the mechanism

²¹ Adler, Emanuel. "Constructivism in international relations: Sources, contributions, and debates." *Handbook of international relations* 2 (2013): 112-144.

²² Jupille, Joseph, James A. Caporaso, and Jeffrey T. Checkel. "Integrating institutions: Rationalism, constructivism, and the study of the European Union." *Comparative political studies* 36, no. 1-2 (2003): 7-40.

²³ Brunkhorst, Hauke. *Solidarity: from civic friendship to a global legal community*. mit Press, 2005.; Berenskoetter, Felix. "Friends, there are no friends? An intimate reframing of the international." *Millennium* 35, no. 3 (2007): 647-676.; Onuf, Nicholas. *World of our making: Rules and rule in social theory and international relations*. Routledge, 2012.; Agius, Christine. "Social constructivism." *Contemporary security studies* 3 (2013): 87-103.

²⁴ Marques, Tiago. "Constructing Supranational Security Interests in a Wider Europe."

²⁵ Senyuk, Yuliya. "The cultures of anarchy of the international system and their influence on European integration processes." *Evropsky politicky a pravni diskurz* 5, Iss. 1 (2018): 55-59.

²⁶ Best, Antony, Jussi Hanhimäki, Joseph A. Maiolo, and Kirsten E. Schulze. *International history of the twentieth century and beyond*. Routledge, (2008):557-560

²⁷ Ungerer, Horst. *A concise history of European monetary integration: from EPU to EMU*. Greenwood publishing group, 1997.; Gilbert, Mark. *European integration: A political history*. Rowman & Littlefield Publishers, 2020.

²⁸ Marques, Tiago. "Constructing Supranational Security Interests in a Wider Europe."

operating by supranational institutions.²⁹ In short, the regional logic in the EU is replacing from rivalry to friendship,³⁰ which might be the pioneer of Kantian culture. Represented by Acharya³¹, constructivists conduct studies of their cooperation and integration among other regions like the ASEAN³², post-soviet area³³, African countries³⁴, and the Belt and Road region³⁵. However, almost all are more or less following the EU's study mode. Scholars also are interested in whether Kantian culture could be formed in bilateral relations between states. In this direction, the mainstream research approach is to examine the historical stages and possible causes of the change in the different anarchic cultures through textual analysis of official documents and archives, such as legal treaties and policies, trade agreements, and speeches of leaders.³⁶

However, all these above are not very comprehensive. **1.** Most of them can be criticized as state-centralist.³⁷ Scholars still mainly care about states, traditional participants of international systems, which restricts their discussion scope and ignores the potential to approach Kantian culture from some uncommon pathways. **2.** Many of them tend to use a constructivist

Llewellyn, Saskia. "Testing the solid in solidarity: An examination of why the on-going refugee crisis is the most important challenge facing the EU." *Australian Institute of International Affairs*, available from <http://www.internationalaffairs.org.au/news-item/testing-the-solid-in-solidarity-an-examination-of-why-the-on-going-refugee-crisis-is-the-most-important-challenge-facing-the-eu> (2016).

²⁹ Mark. *European integration*. 2

³⁰ Spara, Matti. "From Rivalry to Friendship: The European State Systems and the Cultures of Anarchy."

³¹ Acharya, Amitav. "How ideas spread: Whose norms matter? Norm localization and institutional change in Asian regionalism." *International organization* 58, no. 2 (2004): 239-275.

³² Cho, Sungjoon, and Jurgen Kurtz. "International Cooperation and Organizational Identities: The Evolution of the ASEAN Investment Regime." *Nw. J. Int'l L. & Bus.* 37 (2016): 173.

³³ MARTSENYUK, DANIEL. "Identifying the discourse of Kantian culture of anarchy in the context of post-Soviet sub-regional integration (EurAsEC and GUAM as a case study)." Master's thesis, 2010.

³⁴ Williams, Paul D. "Explaining and understanding security cooperation in Africa." *African Security Review* 19, no. 2 (2010): 97-105.

³⁵ Zhou, Weifeng, and Mario Esteban. "Beyond balancing: China's approach towards the Belt and Road Initiative." *Journal of Contemporary China* 27, no. 112 (2018): 487-501.

³⁶ Thao, Nguyen Thu. "The Role of US Public Diplomacy in the Transformation of US-Vietnam Relations: A Constructivist Analysis." *The views and opinions expressed herein are those of the authors and do not necessarily reflect the views of the Thammasat Institute of Area Studies*.: 1.; Mölder, Holger. "The War of Narratives—Putin's Challenge to International Security Governance in Ukraine." *Söjateadlane* 2 (2016): 88-113.; Uemura, Takeshi. "Understanding Chinese foreign relations: A cultural constructivist approach." *International Studies Perspectives* 16, no. 3 (2015): 345-365.; Uemura, Takeshi. "Understanding Sino-Japanese Relations: Proposing a Constructivist Approach in Chinese Studies." *Journal of Contemporary East Asia Studies* 2, no. 1 (2013): 95-127.

³⁷ Linklater, Andrew, and Hidemi Suganami. *The English school of international relations: a contemporary reassessment*. Vol. 102. Cambridge University Press, 2006

perspective to analyze which elements of the existing international order are conducive to the realization of Kantian culture. Thus, their solutions for forming Kantian culture often seem like incrementalism explanations³⁸ of the present situation, which are vague and have a long distance to travel. **3.** Like Buzan's criticism 'You can throw anything in the (constructivism) trash',³⁹ many constructivists do not follow Wendt's logical system in their research. Instead, we see some scholars appropriating the concept and mechanism. Hence, more empirical studies for realizing Kantian culture still be required.

3 Metaverse and Kantian culture

The recent news of Facebook's announcement to change the company's name has further increased the buzz around Metaverse. Although it's the most popular tech word of 2021, there still doesn't have a clear definition of the novel technology, not to mention the analysis of its impact on the international system. This work attempts to separate Metaverse into four supporting technologies - XR, AI, Blockchain, and the Future Networks - according to it has shown features. Then, this work considers how Metaverse fits with two variables of Kantian culture.

3.1 Technology and international relations

Most people today will agree with Thomas Kuhn's description of the impact of science and technology: we live in a technology-driven world⁴⁰. Barry Buzan and Richard Little even assert that technology almost determine the history after the establishment of the Westphalian

³⁸ Dotson, Taylor, and Ben Brucato. "Can Constructivism Have Politics?," 2014

³⁹ Buzan, Barry, and Barry G. Buzan. *From international to world society?: English school theory and the social structure of globalisation*. Vol. 95. Cambridge University Press, 2004.

⁴⁰ Kuhn, Thomas S. "The Structure of Scientific Revolutions." (1962).

System and shape the modern IR theory⁴¹. Ogilvie⁴², Parrott⁴³, and Strachan⁴⁴ have studied how the technologies that emerged during the first industrial revolution, like telegram and widely switching from the cold weapon to the firearm create the frame of modern war and global society. For the same reason, it's hard to imagine that Waltz and Keohane could produce their theories without the second industrial revolution and a world system transformed by related technologies.

Actually, there have some political scholars have studied the IR influence of emerging technologies in the past decade. Like McCarthy⁴⁵, Madeline⁴⁶, Shawn and Jablonski⁴⁷, many scholars have followed the wave of information technology arousing since 2000 and conducted in-depth studies on the impact of the Internet on international relations. However, on the one hand, they have mostly ignored many innovative technologies emerging in the past few years. On the other hand, they tend to be anchored in advising specific countries or regions on their policies, thus limiting the scope of the topics they discuss. Indeed, there already have many studies for those more novel technologies, like Artificial Intelligence, 5G, Big Data, Blockchain, Extended Reality, etc. But as we learn from the history of industrial revolutions, some isolated technological breakthroughs are not the same as epochal change and are less likely to bring about a new shaping of society.⁴⁸ Therefore, we still don't see some exciting and comprehensive social transformations. However, this work argues that metaverse might be the opportunity to the revolutionary change and a potential approach to realize Kantian culture.

⁴¹ Buzan, Barry, and Richard Little. *International systems in world history: remaking the study of international relations*. Oxford University Press, 2000.

⁴² Ogilvie, Sheilagh. "The beginnings of industrialization." *Germany: a new social and economic history* 2 (1996): 1630-1800.

⁴³ Parrott, David. *The business of war: Military enterprise and military revolution in early modern Europe*. Cambridge University Press, 2012.

⁴⁴ Strachan, Hew. *European armies and the conduct of war*. Routledge, 2005.

⁴⁵ McCarthy, Daniel R. *Power, information technology, and international relations theory: The power and politics of US Foreign policy and internet*. Palgrave Macmillan, 2015.

⁴⁶ Carr, Madeline. "Power plays in global internet governance." *Millennium* 43, no. 2 (2015): 640-659.

⁴⁷ Powers, Shawn M., and Michael Jablonski. *The real cyber war: The political economy of internet freedom*. University of Illinois Press, 2015.

⁴⁸ Stearns, Peter N. *The industrial revolution in world history*. Routledge, 2020.

3.2 What is Metaverse

Metaverse is derived from the combination of the prefix “meta-” (transcend or beyond) and “-verse” (universe), meaning this is a world beyond the real universe⁴⁹. This concept was first created by SF author in 1992⁵⁰ and was portrayed as a fantastic cyber-world where people could interact with AI and other people geographically all over the world through 3D avatars. Since last year, there have appeared many applications showing the development trend of Metaverse. (Figure 2) In April 2020, Travis Scott and Epic company hosted a 15-minute virtual concert, with a total of 27.7 million participants and 45.8 million visits worldwide. Similar virtual events have also attracted celebrities such as Joe Biden, Michelle Obama, and more.⁵¹ In May 2020, UC Berkeley hosted an online graduation ceremony at a virtual campus, where graduates could connect to the server for an immersive experience.⁵² In August 2021, Facebook launched the Horizon Workrooms application, providing VR conference scenarios for offices.



Figure 2. Virtual concert, graduation, and conference

Metaverse have the features of electrical games, but it is not simply equal to games. In addition, Metaverse is not equivalent to the description and definition of cyberspace or virtual world in the current Internet era. Even though some scholars describe it as the “future of the

⁴⁹ Sparkes, Matthew. "What is a metaverse." (2021): 18.

⁵⁰ Stephenson, Neal. *Snow Crash: A Novel*. Spectra, 1992.

⁵¹ NBC News. 2021. *Opinion | Coronavirus forced stars like Travis Scott to get creative — and fans are benefiting*. [online] Available at: <<https://www.nbcnews.com/think/opinion/fortnite-s-travis-scott-concert-was-historic-he-s-not-ncna1195686>> [Accessed 2 November 2021].

⁵² Berkeley News. 2021. *Watch Blockeley, UC Berkeley's online Minecraft commencement*. [online] Available at: <<https://news.berkeley.edu/2020/05/16/watch-blockeley-uc-berkeleys-online-minecraft-commencement/>> [Accessed 2 November 2021].

internet,”⁵³ Metaverse should be closer to the product of the combination of real world and virtual one. In this world, the virtual part enriches human perception and experience, extending human creativity and possibilities. Human behavior in the virtual part can also have an impact on the physical world. The boundaries between the virtual world and the real world become blurred. In short, Metaverse is a combined technology and a positive vision of the future way of human life. (Figure 3)

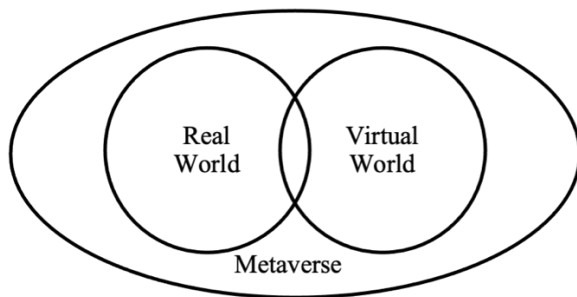


Figure 3. The relationship between Metaverse and real and virtual words

Based on its characteristics, it can be inferred that a large number of existing hardware and software technologies must be innovated and integrated to realize Metaverse. Lee and colleagues have comprehensively sorted the development status and prospects of all enabling technologies related to Metaverse and categorized them into eight aspects: Extended Reality (XR), Human-Computer Interaction, Artificial Intelligence (AI), Blockchain, Computer Vision, Edge and Cloud computing, and Future Networks⁵⁴. However, according to Ockham's Razo principle, this work argues that XR, AI, Blockchain, and Future Networks are the four essential aspects of Metaverse.

⁵³ Valeonti, Foteini, Antonis Bikakis, Melissa Terras, Chris Speed, Andrew Hudson-Smith, and Konstantinos Chalkias. "Crypto Collectibles, Museum Funding and OpenGLAM: Challenges, Opportunities and the Potential of Non-Fungible Tokens (NFTs)." *Applied Sciences* 11, no. 21 (2021): 9931.

⁵⁴ Lee, Lik-Hang, Tristan Braud, Pengyuan Zhou, Lin Wang, Dianlei Xu, Zijun Lin, Abhishek Kumar, Carlos Bermejo, and Pan Hui. "All One Needs to Know about Metaverse: A Complete Survey on Technological Singularity, Virtual Ecosystem, and Research Agenda." (2021).

3.3 The technology-driven opportunity to Kantian culture

Analyzing all “Metaverse” related literature and their citations since 1992-2021 in the “Web of Science” database by CiteSpace software reveals that⁵⁵: 1. important nodes of research on this area have mainly appeared since 2010; 2. present works are focused on psychology (Theory of mind, Avatar therapy, and Affordance), digital technology (Virtual reality, Virtual world), and identity issue (Identification, Avatars, Second life). (Figure 4) From the existing studies, it can be found that the possible impact of Metaverse on international relations has been less studied.

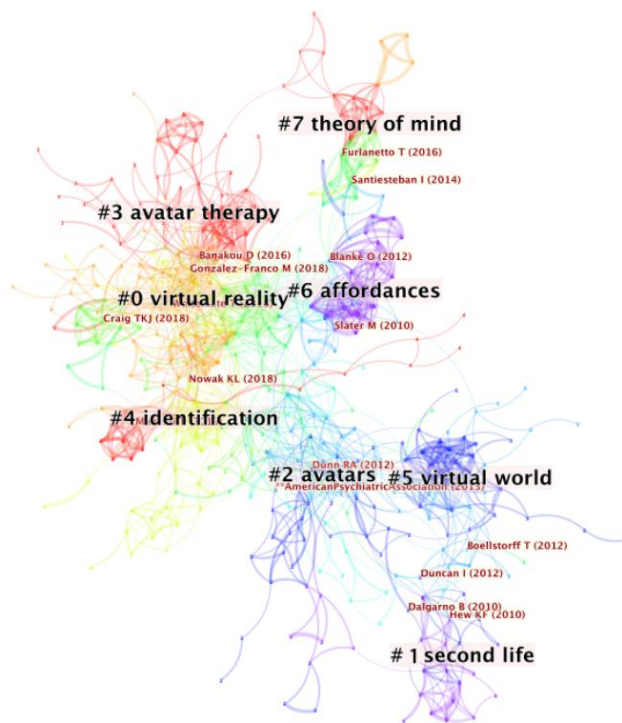


Figure 4. Current main research areas of metaverse

⁵⁵ The analysis chooses "All fields" as the searching scope, "metaverse" and "1992-2021" as the filtering condition. The exported data contains "Full records and cited reference." After the de-duplication, a total of 8537 articles and their references were applied to the analysis.

The Reform Club, a nearly 200-year-old British political club, predicted that Metaverse would be very different from other social technologies in terms of “friendship” and “trust”.⁵⁶ Indeed, it is natural to associate these features with the description of the variables in Wendt's constructivism. As described above, this work argues Metaverse might be one opportunity to realize Kantian culture. The following part will analyze the relationship between them through one efficient cause, **homogeneity**, and the enabling cause, **trust**.

3.3.1 Metaverse affords a platform to establish the homogeneity. Metaverse offers homogeneity far beyond the existing cyberspace on two levels: individual and collective group. Through these two levels' changes, Metaverse provides a new platform to increase the homogeneity of people's identity (Figure 5).

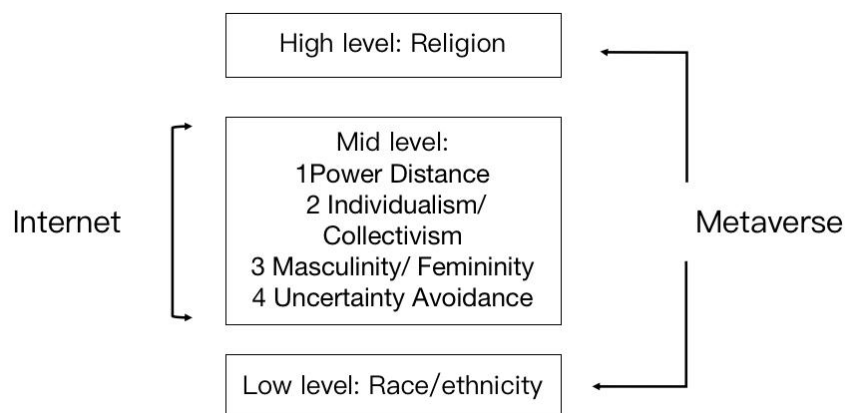


Figure 5. Regarding the homogeneity, metaverse provides the high level and low level causes different with traditional internet

At the individual level, since the development of the Internet, users have been able to set their own usernames and profile to describe their identity when they register. Some interdisciplinary scholars like Sherry Turkle⁵⁷ and Howard Rheingold⁵⁸ had predicted the

⁵⁶ Globaldashboard.org. 2010. *Virtual Worlds: The death of geography and the end of privacy*. [online] Available at: <<https://www.globaldashboard.org/2010/07/15/on-virtual-worlds/>> [Accessed 15 November 2021].

⁵⁷ Turkle, Sherry. *The second self: Computers and the human spirit*. Mit Press, 2005.

⁵⁸ Rheingold, Howard. *The Virtual Community, revised edition: Homesteading on the Electronic Frontier*. MIT press, 2000.

possibility of providing people with a second-self different from the real one through computers and networks. They also pointed out from a psychological perspective that, compared to the more uncontrollable real world, people's virtual second identities will, on the one hand, continue some of their real characteristics (like the description of educational experience), but at the same time, due to the controllability and orderliness of the process, people will be happy to idealize and reshape the second identity. The lure of reconfiguration and mobility of the second self has been one primary motivation for people to participate in virtual worlds.⁵⁹ For example, more than 10% of clients on Habitat, an open-world online community in the early 2D image era, had tried switching the gender of their avatar, and nearly 30% of clients had chosen an avatar with non-human-looking.⁶⁰ From a simple string of usernames in the early days of the Internet to today's widely used avatar images, both hide the clients' gender, race, and other information. While such a second self provides a "text-only" rediscovery of identity, it also results in a lack of "primordial tactility" during interactions.⁶¹ This decoupling of identity and perception makes it difficult for clients further to project their empathy onto the avatar and second identity⁶² while also failing to satisfy people's desire for self-performance⁶³. So, as technology develops, various software offers increasingly rich and realistic avatar creation options, and there are even professional makers who help others create avatars to fulfill clients' requirements of second self.⁶⁴

⁵⁹ Nakamura, Lisa. *Cybertypes: Race, ethnicity, and identity on the Internet*. Routledge, 2013.

⁶⁰ de Wildt, Lars, Thomas H. Apperley, Justin Clemens, Robbie Fordyce, and Souvik Mukherjee. "(Re-) Orienting the Video Game Avatar." *Games and Culture* 15, no. 8 (2020): 962-981.

⁶¹ Hansen, Mark. *Embodiment technesis: Technology beyond writing*. University of Michigan Press, 2000.

⁶² Chung, Donghun, Brahm Daniel DeBuys, and Chang S. Nam. "Influence of avatar creation on attitude, empathy, presence, and para-social interaction." In *International Conference on Human-Computer Interaction*, pp. 711-720. Springer, Berlin, Heidelberg, 2007.

⁶³ Goffman, Erving. *The presentation of self in everyday life*. Vol. 21. London: Harmondsworth, 1978.

⁶⁴ Gamera.com. 2021. *Game face-maker monthly income of tens of thousands of dollars, will you pay for an avatar?*. [online] Available at: <<https://www.gamera.com/888738.html>> [Accessed 19 November 2021].

However, the avatars currently available to clients are still structured combinations of 3D elements, so while the virtual avatar has reached an unprecedented level for self-expression and second identity, there are still severe limitations.⁶⁵ Scholars have also found that expressions and appearance details are directly and significantly positively correlated with social perceptions such as similarity, familiarity, attractiveness, liking, and engagement.⁶⁶ In other words, the full-body, real-time, highly detailed avatar brought by Metaverse will bring about a revolution in the way people construct and recognize their second identity. Moreover, as a response and difference to the critique that the current cyberspace-based construction of "electronic identity"⁶⁷ is a cheap game of escapism that will not produce critical changes in the real world,⁶⁸ the identity constructed by Metaverse is not a virtual existence in opposition to the real one. Since Metaverse has the capability to dissolve the border between the real and the virtual, the change it brings should be an extension of people's real identity based on a high level of recognition at the individual level.

At the collective group level, homogeneity generally refers to whether people share the same culture or consider themselves one race and ethnicity. For cultural identification, Kluckhohn defines the situation as the patterns of thinking and perception.⁶⁹ Social psychologist Hofstede goes further and proposes the concept of "common mental programming" and analyzes it at three elements of symbols, rituals, and icons.⁷⁰ Symbols mean objects bearing special meanings like words, languages, and pictures. Rituals refer to the way people are employed to

⁶⁵ Nakamura, Lisa, and Peter Chow-White, eds. *Race after the Internet*. New York: Routledge, 2012.

⁶⁶ Park, Sung, Si Pyoung Kim, and Mincheol Whang. "Individual's Social Perception of Virtual Avatars Embodied with Their Habitual Facial Expressions and Facial Appearance." *Sensors* 21, no. 17 (2021): 5986.

⁶⁷ Žižek, Slavoj. *The plague of fantasies*. Verso, 1997.

⁶⁸ Kelemen, Mihaela, and Warren Smith. "Community and its' virtual'promises: A critique of cyberlibertarian rhetoric." *Information, Communication & Society* 4, no. 3 (2001): 370-387.

⁶⁹ Kluckhohn, Clyde. "Culture: A critical review of concepts and definitions." *Papers. Peabody Museum of Archaeology & Ethnology, Harvard University* (1952).

⁷⁰ Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. *Cultures and organizations: Software of the mind*. Vol. 2. New York: McGraw-hill, 2005.

pay intense emotions, such as festivals. And icons represent the leader, celebrity among the group. From this perspective, Metaverse is essentially no different from cyberspace. It simply offers more opportunities to generate group homogeneity on a broader scale and to a deeper degree. However, in his subsequent studies of Eastern and Western societies, he found that with the spread of the Internet and globalization, there is a clear convergence between Eastern and Western cultures in four areas: Power Distance, Individualism/Collectivism, Masculinity/Femininity, and Uncertainty Avoidance. Interestingly, there is still a significant difference in the Long-term/Short-term Orientation aspect.⁷¹ This aspect is defined by the influence of religion, like Confucianism in the east and Christianity in the west.⁷² In other words, the current development of the internet doesn't make an apparent religious combination among different cultural groups.⁷³

According to Yuval Noah Harari, the author of *A Brief History of Mankind*, religion is “a big virtual reality game played by millions of people together”.⁷⁴ Indeed, in some current applications of Metaverse, there are some distinct changes in many traditional religions. In the wake of the epidemic, some Christian churches are beginning to build VR churches using Metaverse-related technology.⁷⁵ Unlike current digital churches built on existing web-based technology, Christian theologians believe the technological features of Metaverse enable rituals to be done in a virtual world⁷⁶. And Metaverse churches are more in line with Christian doctrine

⁷¹Hofstede, Geert. "Culture's recent consequences: Using dimension scores in theory and research." *International Journal of cross cultural management* 1, no. 1 (2001): 11-17.

⁷² Minkov, Michael. *Cultural differences in a globalizing world*. Emerald Group Publishing, 2011.

⁷³ Jun, Guichun. "Virtual reality church as a new mission frontier in the metaverse: Exploring theological controversies and missional potential of virtual reality church." *Transformation* 37, no. 4 (2020): 297-305.

⁷⁴Vodafone Institute. 2021. "One answer might be computer games". [online] Available at: <<https://www.vodafone-institut.de/aiandi/one-answer-might-be-computer-games/>> [Accessed 21 November 2021].

⁷⁵ VR Church. 2020. *VR Church*. [online] Available at: <<https://www.vrchurch.org/>> [Accessed 21 November 2021].

⁷⁶ Estes, Douglas. *SimChurch: Being the church in the virtual world*. Zondervan, 2009.

as no boundary Kingdom⁷⁷, allowing believers to encounter God as in a real church⁷⁸ while strongly linking virtual and real communities.⁷⁹ Another unignorable project is the Jewish Cloud Nation.⁸⁰ It is a decentralized autonomous religious organization based on blockchain. Its purpose is to create a cloud nation of Judaism that crosses geographical, political, and ethnic boundaries. Unlike traditional Judaism, which only accepts Jews, this project welcomes “anyone who wishes to partake in Jewish life.” Additionally, all other major religions such as Islam, Buddhism, and Hinduism have the project to develop a spiritual utopia in Metaverse.⁸¹ Some of them even in one virtual platform and share the same clients. Generally, religions possibly will show more openness and integrations in Metaverse.

For the racial and ethnic aspect, it’s consistent the main reason of conflicts after the National Liberation Movement. The features of different race and ethnicity are used to rationalize the superiority of certain one over others.⁸² For this, at the individual level, we have already explored the potential of the high degree of freedom avatar brought by Metaverse, offering each client the possibility to change the “physical” characteristics of the body. It is not known what the ultimate impact of easily changing one's features will have on group interactions, but at least it offers more possibilities. Reeves discusses the possibility and process to use Metaverse to educate and end racism.⁸³ Mohammed studies the different behavioral patterns of other groups on whether the virtual female avatar wears a hijab. While he calls for the inclusion

⁷⁷ McNeill, John T., ed. *Calvin: Institutes of the Christian religion*. Westminster John Knox Press, 1960.

⁷⁸ The Economist. 2020. *Online services swell the Church of England's congregations*. [online] Available at: <<https://www.economist.com/britain/2020/06/04/online-services-swell-the-church-of-englands-congregations>> [Accessed 21 November 2021].

⁷⁹ Estes, *SimChurch*, 2009

⁸⁰ Jewish cloud nation. [online] Available at: <<https://www.jewishcloudnation.com/copy-of-home>> [Accessed 21 November 2021].

⁸¹ Center for Digital Society. n.d. *Spiritual Utopia in the Virtual Space*. [online] Available at: <<https://cfds.fisipol.ugm.ac.id/2020/06/15/spiritual-utopia-in-the-virtual-space-living-in-the-heavenly-second-live-sl/>> [Accessed 21 November 2021].

⁸² Fredrickson, George M. *Racism*. Princeton University Press, 2015.

⁸³ Reeves, Courtney. "How Do We End Racism?." (2020).

of Muslims, his research also shows that Metaverse opens up possibilities for Islamic women to change their Muslim identity.⁸⁴ Furthermore, as Weber criticized, ethnic belonging is based more on beliefs than on blood.⁸⁵ With current Internet technology, many cross-racial and -ethnic subcultural communities have been generated, such as a global fervor for the EDG game team.⁸⁶ Metaverse, being an evolution of the existing Internet, is bound to generate more collective homogeneity in the future as well.

3.3.2 Metaverse affords an environment to establish the trust. Francis Fukuyama asserts that identity concept has become the dominant point to understand the global affairs.⁸⁷ However, he also critiques the current Left in Western society, which only emphasizes the spiritual consistency of identity (like distinguishing the race) but avoids addressing the material incomes and political rights of immigrants, minorities, workers in developing countries, etc. And it makes populism and conservatism more attractive at present.⁸⁸ According to Wendt's theory, this kind of identity politics is only symbolically emphasizing efficient causes. As mentioned above, blockchain is essentially a trusted network that enables the transfer of value based on procedural code rather than law. Hence, Metaverse provides a trusting environment and resolves the problems of the Left's empty identity politics.

In general, people need authority as a third-party constraint to build trust when dealing with others.⁸⁹ But in this way, a global government becomes the only solution. So, researchers

⁸⁴ Mohammed, Methal. "Cultural identity in virtual reality (VR): A case study of a Muslim woman with hijab in Second Life (SL)." *Journal For Virtual Worlds Research* 2, no. 2 (2009).

⁸⁵ Hechter, Michael. "Response to Cohen: Max Weber on ethnicity and ethnic change." (1976): 1162-1168.

⁸⁶ Upcomer. 2021. *EDG's faithful fans are finally rewarded with a Worlds 2021 title*. [online] Available at: <<https://www.upcomer.com/edgs-faithful-fans-are-finally-rewarded-with-a-worlds-2021-title/>> [Accessed 21 November 2021].

⁸⁷ Fukuyama, Francis. "Against Identity politics: The new tribalism and the crisis of democracy." *Foreign Aff.* 97 (2018): 90.

⁸⁸ Fukuyama, Francis. "The populist surge." *The American Interest* 13, no. 4 (2018): 9.

⁸⁹ Van den Bos, Kees, Henk AM Wilke, and E. Allan Lind. "When do we need procedural fairness? The role of trust in authority." *Journal of Personality and social Psychology* 75, no. 6 (1998): 1449.

are continually seeking an alternative that would eliminate differences and build trust. Habermas discusses how public sphere such as 18th-century cafes allowed traditional aristocrats, the emerging bourgeoisie, intellectuals, and industrial workers to come together to discuss literature and current affairs openly.⁹⁰ While such public spaces afforded a trusting environment crossed identity and classe differences to a certain extent, they were generally a fragile structure that was difficult to sustain, especially after the rise of capital- or state-controlled mass media.⁹¹ Then people put their hopes on television, internet, and other emerging media. But in the end, most of these methods have been reduced to the same failed fate. Some of them became part of authority, and others were filled with false and confusing information.⁹² However, Metaverse offers some possible ways to span disparities and establish a broad trust.

The mechanism and process aspect, due to the development of technology, many governance ideas and assumptions have gained the possibility to be realized. This work lists two relative mature methods of Metaverse promoting trust. **First**, before handling an issue, some rules have ensured trust. When the tenure voting,⁹³ which the market has abandoned for technical reasons, is combined with blockchain and AI tech, those shares or tokens that are held longer will receive more weighting given by the algorithm. In other words, those long-term holders (or participants who bet more opportunity cost on the project, the company, and the community) will

⁹⁰ Habermas, Jurgen, and Jürgen Habermas. *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. MIT press, 1991.

⁹¹ Schulz, Winfried. "Changes of mass media and the public sphere." *Javnost-The Public* 4, no. 2 (1997): 57-69.

⁹² Habermas, Jürgen. *Between facts and norms: Contributions to a discourse theory of law and democracy*. John Wiley & Sons, 2015.; Young, Alyson L., and Anabel Quan-Haase. "Information revelation and internet privacy concerns on social network sites: a case study of facebook." In *Proceedings of the fourth international conference on Communities and technologies*, pp. 265-274. 2009.

⁹³ Berger, David J., Steven Davidoff Solomon, and Aaron J. Benjamin. "Tenure Voting and the US Public Company." *The Business Lawyer* 72, no. 2 (2017): 295-324.

get more voting rights.⁹⁴ Another mechanism is Quadratic Payments, which works on the principle that for every additional unit of voting right obtained by a participant, the price will increase by one unit. Thus, if a person wants to cast N votes on a project, it costs approximately a quadratic multiple of the number of votes. Under this mechanism, the dilemmas of one-person-one-vote and one-dollar-one-vote are overcome to some extent.⁹⁵ **Second**, after handling an issue, accountability is another important mechanism to promote trust. Accountability is the method that accompanies the transparency nature of the blockchain. Because each step of the operation can be retraced, the actions of any participant can be rewarded or penalized accordingly after the issue.⁹⁶ It also facilitates the generation of trust.

The organization aspect, the Decentralized Autonomous Organization (DAO) is one kind of management system that people in it will cooperate and govern themselves by some blockchain- and AI-based automatic rules or contracts.⁹⁷ According to recent research in some industrial applications, this kind of organization doesn't need a centralized authority to govern its individual participants and significantly afford more efficiency into the operation process and reduces the decision-making cost⁹⁸ but can also excellently ensure security and stability at the same time.⁹⁹ If the BIoT is blurring the boundary between reality and virtual at the object level, DAO provides a way to transform and innovate real organizational entities such as companies, communities, and even governments. Recently, the most famous public event involving

⁹⁴ Andreessen Horowitz. 2019. *Tenure Voting and Rethinking What's Fair in Corporate Governance*. [online] Available at: <<https://a16z.com/2019/08/14/tenure-voting-vs-dual-class-corporate-governance/>> [Accessed 21 November 2021].

⁹⁵ Barrera, Cathy, and Stephanie Hurder. "Blockchain upgrade as a coordination game." *Available at SSRN 3192208* (2018).

⁹⁶ Shin, Donghee, and William T. Bianco. "In Blockchain We Trust: Does Blockchain Itself Generate Trust?." *Social Science Quarterly* 101, no. 7 (2020): 2522-2538.

⁹⁷ Hassan, Samer, and Primavera De Filippi. "Decentralized Autonomous Organization." *Internet Policy Review* 10, no. 2 (2021): 1-10.

⁹⁸ Baninemeh, Elena, Siamak Farshidi, and Slinger Jansen. "A Decision Model for Decentralized Autonomous Organization Platform Selection: Three Industry Case Studies." *arXiv preprint arXiv:2107.14093* (2021).

⁹⁹ Beck, Roman, Christoph Müller-Bloch, and John Leslie King. "Governance in the blockchain economy: A framework and research agenda." *Journal of the Association for Information Systems* 19, no. 10 (2018): 1.

Metaverse is Constitution DAO, a DAO founded on November 11 of this year by several netizens on Discord, a well-known but straightforward Metaverse platform. Their goal was to raise funds to bid on a copy of the U.S. Constitution. In this way, they hope to achieve an ideological goal: to take back the constitution that should belong to the people themselves. Based on the trust provided by technologies, this DAO raised a total of \$45 million to participate in the bidding eight days later. Although Constitution DAO lost out in the bidding and announced its dissolution at the end of November, all those who participated in the fundraising could retrieve their funds without any problems.¹⁰⁰ From this example, it can be inferred that DAO is very efficient and agile as an organizational form. It is reasonable to assume that Constitution DAO provides a demonstration effect, and we may soon see a variety of DAOs appearing in traditional geopolitical events.

The scope aspect, this technology-based trust is highly effective in many places that traditional authority cannot reach. In the absence of governmental power, technology-based trust empowers local people, reduces power asymmetries, and enhances their incomes and livelihoods by reducing the cost of trust in transactions.¹⁰¹ Especially in Africa, the world's most remote region of the Internet but also one of the most approving zones of blockchain,¹⁰² the establishment of technology-based trust has resulted in significant economic benefits due to its lesser political and regulatory baggage.¹⁰³ It also helps refugees from Syrian to obtain a legal

¹⁰⁰ The Verge. 2021. *From a meme to \$47 million: ConstitutionDAO, crypto, and the future of crowdfunding*. [online] Available at: <<https://www.theverge.com/22820563/constitution-meme-47-million-crypto-crowdfunding-blockchain-ethereum-constitution>> [Accessed 10 December 2021].

¹⁰¹ Kim, Minjin, Hanah Zoo, Heejin Lee, and Juhee Kang. "Mobile, financial inclusion and development: a critical review of academic literature." In *10th Annual Pre-ICIS SIG Global Development Workshop*, p. 28. Association for Information Systems eLibrary, 2017.

¹⁰² Mokobi, Enock. "Blockchain technology as an enabler of economic development in Africa." *Development Finance Agenda (DEFA)* 6, no. 1 (2020): 14-15.

¹⁰³ Mavilia, Roberto, and Roberta Pisani. "Blockchain and catching-up in developing countries: The case of financial inclusion in Africa." *African Journal of Science, Technology, Innovation and Development* 12, no. 2 (2020): 151-163.

identity.¹⁰⁴ Regard further applications, the cities of Miami and Reno are both experimenting with new governmental systems of city taxation, land use, and voting based on blockchain and crypto tokens.¹⁰⁵ In addition, there are three most radical projects which show us the potential influence of Metaverse in international relations.

3.3.3 CityDAO, Meta-Seoul, and e-Residency. CityDAO, Meta-Seoul, and e-Residency are three of the most radical projects currently. In a sense, they are also the closest to the above definition of Metaverse: a combination of virtual and reality. CityDAO is a blockchain-based virtual organization whose participants, adhering to a consensus of democracy and autonomy. They crowdfunded a 40-acre parcel of wilderness land in Wyoming, USA, with 2021. The project then divided the purchased land into 10,000 shares and mapped each share to the blockchain to form a virtual object. Anyone who endorsed the organization's concept can purchase the blockchain land. After that, the project will rely on the decentralized management method and let the clients vote entirely on the construction of the new city. According to their plan, they'll continue to purchase land all over the world, and build other DAO cities.¹⁰⁶ Interestingly, the government shows a relatively friendly attitude, and the project is currently in compliance with the laws of the country of location.¹⁰⁷

Meta-Seoul is a municipal Metaverse plan operated by Seoul government.¹⁰⁸ The Seoul government has announced that it will invest 3.9 billion to create a digital twin of the entire real

¹⁰⁴ Barbino, Victoria H. "Finding Refuge: Blockchain Technology as the Solution to the Syrian Identification Crisis." *Georgia Journal of International and Comparative Law* 48, no. 2 (2021): 523-562.

¹⁰⁵ Publish0x.com. 2021. *Miami and Reno - Crypto Bails Out Corrupt and Useless Politicians*. [online] Available at: <<https://www.publish0x.com/alternative-investing/miami-and-reno-crypto-bails-out-corrupt-and-useless-politici-xdgmvey>> [Accessed 21 November 2021].

¹⁰⁶ Citydao.io. 2021. *CityDAO*. [online] Available at: <<https://www.citydao.io/#Section-1>> [Accessed 21 November 2021].

¹⁰⁷ Wyoleg.gov. 2021. *SF0038 - Decentralized autonomous organizations Law*. [online] Available at: <[https://www.wyoleg.gov/Legislation/2021/SF0038#:~:text=A%20decentralized%20autonomous%20organization%20\(DAO,smart%20contracts%20executed%20by%20computers.>](https://www.wyoleg.gov/Legislation/2021/SF0038#:~:text=A%20decentralized%20autonomous%20organization%20(DAO,smart%20contracts%20executed%20by%20computers.>)> [Accessed 22 November 2021].

¹⁰⁸ Squires, C., 2021. *Seoul will be the first city government to join the metaverse*. [online] Quartz. Available at: <<https://qz.com/2086353/seoul-is-developing-a-metaverse-government-platform/>> [Accessed 22 November 2021].

Seoul city. By 2026, the Meta-Seoul will allow its residents access the same legal governmental functions in the virtual world as in the real. In addition, the government plans to establish a city-wide IoT and robot service system to connect public services such as transportation, logistics, and water supply in the virtual and real worlds. So that what happens in the real world can be presented in the virtual world promptly, and what people do in the virtual world can be influenced back to the real world through robots and the IoT. Experts judge that Meta-Seoul is significant for Korean¹⁰⁹ since it will set a Korea standard and rules for other countries in the post-COVID-19 era and will profoundly impact the future.¹¹⁰

And e-Residency is the world's first cloud citizenship project led entirely by the Estonian government. After examination by the Estonian Police and Border Guard Board, applicants will receive an e-ID identical to that of Estonian citizens. All these application processes are operated remotely and on Blockchain. After being an e-Resident, people can enjoy almost all the rights of Estonian citizens except for travel visas, such as opening a company and enjoying the same 0% tax on retained profits as Estonian citizens, opening bank accounts, paying taxes, etc.¹¹¹ Previously, all these rights could only be obtained after being an EU permanent resident. The project seeks to create a "new digital nation" and a new kind of sub-citizenship. Currently, about 10 million people worldwide have applied, and about 85000 of them have been awarded the Estonian e-resident identity. More than 1/3 of these e-residents apply to be part of this project simply because they admire the notion of this identity.¹¹²

¹⁰⁹ The Korea Herald. 2021. *Seoul to offer new concept administrative services via metaverse platform*. [online] Available at: <<http://www.koreaherald.com/view.php?ud=20211103000692>> [Accessed 22 November 2021].

¹¹⁰ Kim, S., 2021. *South Korea's Approach to the Metaverse*. [online] The diplomat. Available at: <<https://thediplomat.com/2021/11/south-koreas-approach-to-the-metaverse/>> [Accessed 22 November 2021].

¹¹¹ *e-Residency*. [online] Available at: <<https://www.e-resident.gov.ee/>> [Accessed 21 November 2021].

¹¹² Blue, Anna. "Evaluating Estonian E-residency as a tool of soft power." *Place Branding and Public Diplomacy* 17, no. 4 (2021): 359-367.

Albrecht, Jakob Ludwig. "Belonging in the Digital Age: The Case of Estonia's e-Residency." (2020).

Admittedly, these three cases are still quite far from the real Metaverse. CityDAO is dominated by virtual non-governmental groups and from the virtual to influence the real. Meta-Seoul is dominated by local governments and brings the real into the virtual. And e-resident is a global project led by the nation. Although the three projects are led by different kinds of groups and through different ways of implementation, all of them show cultural homogeneity and algorithm-based trust. And they show the possibility of bringing about a broader and deeper scope of cooperation and peace by Metaverse in the future. From the previous discussion and cases, this work predicts that Metaverse has the potential to satisfy the cause of homogeneity and trust. And according to Wendt's theory, this will lead clients to form a collective identity and eventually go into Kantian culture.

4 Limitation and Conclusion

While this paper argues that Metaverse can bring friendship and peace, it is undeniable that there is no solid evidence yet of what impact this technological combination will have on society at this time. And, at least for the present internet, many scholars have explored the conflicts and dangers it may cause to the international order. Large and small countries use hackers, algorithms, trolls, bots, and other technical means to computationally propagandize on the Internet to discredit their "enemies" domestically and internationally.¹¹³ All noble virtues and humanity can be transformed into weapons to achieve their goals by regimes, organizations, and individuals with ulterior motives on the Internet.¹¹⁴ Moreover, outside the network, states and organizations can physically restrict and destroy people and devices, the network's carriers

¹¹³ Bienvenue, Emily. "Computational propaganda: political parties, politicians, and political manipulation on social media." (2020): 525-527.

¹¹⁴ Bossetta, Michael. "The weaponization of social media: Spear phishing and cyberattacks on democracy." *Journal of international affairs* 71, no. 1.5 (2018): 97-106.; ÇELA, Lyra. "Weaponization Of Social Media And Islamic Extremism-The Case Of Kosovo."; Makhortykh, Mykola, and Maryna Sydorova. "Social media and visual framing of the conflict in Eastern Ukraine." *Media, War & Conflict* 10, no. 3 (2017): 359-381.

directly.¹¹⁵ Inside the web, occupying the vast amount of information, technology, and resources, technology companies have instead created an even greater digital divide.¹¹⁶ All of these issues are selectively ignored in this paper. On the one hand, Metaverse is not exactly equivalent to the traditional internet, so the problems that the internet cannot overcome may not be reproduced in the future Metaverse. On the other hand, continuing to explore the possible evils of technology does not fit my personality.

Constructivism offers an alternative perspective to consider international relations. This paper first reviews the three degrees and four variables needed to enable the realization of Kantian culture in Wendt's theory. The work then combs previous research on the approach to Kantian culture. Since most of them are imperfect, the paper suggests that Metaverse may be a technological opportunity. As a recent emerging tech term, the paper sorts out the basics of Metaverse and clarifies many related concepts. Consequently, the work analyzes the possibility that Metaverse can contribute to the realization of Kantian culture in terms of homogeneity and trust. Finally, this article cites some current cases.

Constructivism and identity are indeed both theories about “idea” and “thinking,” so they seem very abstract and vague. But scholars like Ted Hopf uses quantitative methods to corroborate that identity can play a crucial role even in the constitution of hegemonic order.¹¹⁷ There is no doubt about the importance of “idea” in the IR area, but I can only make some rough qualitative discussion in this article due to my limited ability. And Metaverse is frankly still relatively far away from its ultimate form and impacts, leading to a lack of concrete examples in my work. This is another major shortcoming that is difficult to overcome. Finally, this paper

¹¹⁵ Siapera, Eugenia, Graham Hunt, and Theo Lynn. “# GazaUnderAttack: Twitter, Palestine and diffused war.” *Information, Communication & Society* 18, no. 11 (2015): 1297-1319.

¹¹⁶ Hui, Yan. *Social Classes in China's Digital Society*. National Book Publishing House, 2013. (In Chinese)

¹¹⁷ Allan, Bentley B., Srdjan Vucetic, and Ted Hopf. “The distribution of identity and the future of international order: China's hegemonic prospects.” *International Organization* 72, no. 4 (2018): 839-869.

argues that Metaverse may bring about peaceful friendship and Kantian culture to human beings. However, it cannot be denied that many scholars are pessimistic about technologies and positive about sovereignty's ability and influence. However, from my perspective, friendship and peace are so fascinating just like the starry heaven described by Kant. So, this article is more like my idealistic attempt in the uncertain post-pandemic era. Moreover, we live in a rapidly changing and more and more digital world, at least this work provides a wider discussion within the social impact of Metaverse.