

METaverse AND THE FUTURE OF BUSINESS AND COMMUNICATION

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Abstract: Interpersonal trust is, according to behavioral economists and scholars in the field of social psychology, an important element of human interaction. Communication scholars also amplify the significance of trust in interpersonal relation and communication. With the rise of virtual spaces and virtual worlds and digital artefacts such as crypto-currencies the importance of trust may become the key issue of human interdependence and cooperation. In this paper authors examine theoretical and empirical concepts of trust applied to different virtual and mixed reality settings from the economic and communication perspective.

Keywords: metaverse, mixed reality, trust, communication, business

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Introduction

According to Ball¹ the first use of the term Metaverse could be found in Neal Stephenson's novel 'Snow Crash' published in 1992 in which he describes a virtual world filled with digital artefacts and avatars of real people that mutually interact to obtain certain goals, whatever they could be and for whatever reason. Even earlier, William Gibson's² *Neuromancer* introduced a virtual reality (VR) world called *Cyberspace* with almost the same functions and levels of interaction but many authors before them played with the same idea – as early as 1935³. Spielberg⁴ showed in his 2018 movie 'Ready Player One' what a virtual world (called OASIS) could look like and gave his imagination a space to envision what consequences in 'the real world (RW)' the existence of such a simulacrum could produce to a social order and institutions or to a society as a whole. Metaverse and its variation from science fiction (SF) artworks are fully immersive and virtual in every sense of the word and even though current technology is only partly there, many companies and organizations, led by Meta Platforms (former Facebook who appropriated the name Metaverse), are incorporating the prefix Meta into their business activities and domains⁵. Virtual world such as Second life⁶ (2D) and Decentraland⁷ already exist and although they have huge figures concerning potential market capitalization, their average

¹ BALL, M. (2022): The metaverse: and how it will revolutionize everything, p. 14.

² GIBSON, W. (2019): *Neuromancer* (1984). In *Crime and Media* (pp. 86-94). Routledge.

³ BALL, M. (2022): The metaverse: and how it will revolutionize everything, p. 15.

⁴ SPIELBERG, S. – SILVESTRI, A. – PENN, Z. – CLINE, E. – DE LINE, D. (2018): *Ready player one*. USA: Warner Bros.

⁵ BALL, M. (2022): The metaverse: and how it will revolutionize everything, p. 8-10.

⁶ <https://secondlife.com/>

⁷ <https://decentraland.org/>

number of daily users are still slim⁸ and Meta Platforms Horizon Worlds is not performing much stronger at the moment.⁹ However, some aspects of virtual reality are widely present in not fully immersive variations such as augmented reality (AR) and mixed reality (MR) with technological giants such as Google and Facebook investing in research of various applications in their products and possibly in everyday life.

Most of the mentioned science fiction works describe utopian world inside virtual reality and dystopian real world outside of the VR set. With VR technologies improving rapidly over past decade,¹⁰ the aim of this article is to, through several theoretical perspectives, examine if the same grim predictions of utopian virtual world and dystopian physical reality could occur regarding social order and institutions in business and communication. In that sense, the term Metaverse will be used to describe some possibly occurring future virtual world and not a company or products by Meta Platforms.

1 Trust and the society

As Rotter¹¹ pointed out ‘the entire fabric of our day-to-day living, of our social world, rests on trust (...) almost all our decisions involve trusting someone else’. Evans and Krueger¹² define interpersonal trust as a mental construct with implications for social functioning and economic behavior and from various points interpersonal trust enhanced with social institutions and social order emerging from a social contract is a building block of almost all human interactivities. Whether social contract is seen from a perspective of Hobbes, Locke and Rousseau or Kant and Rawls is rather irrelevant as long as it’s serve its purpose: to provide certain form of protection and security for which the agents/citizens are willing to give up of the certain degree of their personal or natural rights or freedom. In such a environment model choosers, usually in a position of representation, choose appropriate principle and rules for a chosen model which in turn deliver institutions and order that is accepted by real individuals willingly participating in the given model with ability to change any of the elements of the model, including individuals in positions of representation.¹³

Giddens¹⁴ proposes that social action and thus change is achieved through interplay of agency (i.e. free will of the individuals) and structures in which agents willingly reinforce those structures (i.e. resources and rules) that benefit them within the context negotiated through signification, legitimation and domination, each of which serve specific purpose. Signification uses language and discourse to provide meaning of the social structure, legitimation is achieved through use and reuse of established structures and domination defines positions of power and representation. Jensen¹⁵ asserts that the key channel of negotiation between agency and structure is always the medium in which given negotiations are taking place with its own levels of interactivity and possibilities for discussion.

Habermas¹⁶ calls this channel or space for negotiation between agency and structure, or in his interpretation between individuals and the social institutions, most notably the state, a

⁸ <https://www.theverge.com/2022/10/13/23402418/decentraland-metaverse-empty-38-users-dappradar-wallet-data>;

⁹ <https://www.gamesindustry.biz/metaverse-flagship-metaverse-horizon-worlds-struggling-to-attract-and-retain-users>

¹⁰ XIONG, J et al. (2021). Augmented reality and virtual reality displays: emerging technologies and future perspectives.

¹¹ ROTTER, J. B. (1970): Generalized expectancies for interpersonal trust, p. 443.

¹² EVANS, A. M. – KRUEGER, J. I. (2009): The psychology (and economics) of trust. p. 1003.

¹³ D'AGOSTINO, F. – GAUS, G. – THRASHER, J. (2019): Contemporary Approaches to the Social Contract, The Stanford Encyclopedia of Philosophy.

¹⁴ GIDDENS, A. (1984): The constitution of society: Outline of the theory of structuration.

¹⁵ JENSEN, K. B. (2011): New media, old methods–Internet methodologies and the online/offline divide. p. 23

¹⁶ HABERMAS, J. (2006): Political Communication in Media Society. Communication Theory, Vol 16, no 4.

everything that ever was, is or will or could be based on the innumerable number of various combinations of zeros and ones. That implies that the worlds envisioned by Stephenson, Gibson or Spielberg and others mentioned in the introduction of this article, are not only possible, but a matter of time and technological advancements. With the rise of the internet, early prophets of digitalization,²⁷ envisioned the prosperity and betterment of all aspects of everyday life that was not only predictable but also deemed unavoidable. And indeed, in the early days of the internet, benefits of a global network with the possibility for anyone with a connectible device to connect and engage in an activity of their choice with low or greatly reduced transaction costs brought digital communities together and produced digital commons such as Wikipedia or Linux.²⁸

However, various prominent authors are presenting evidence that introduction of internet in different areas of human interaction can cause significant disruptions^{29 30 31} both to business activities, communication and trust in social institutions and social order. Since 2016 Reuters institute for Journalism reports³² that most of their respondents acquire news from digital sources marking a somewhat of a threshold into the era where individuals' worldview is formed in the digital environment.

Rise of internet platforms that form sort of a monopoly, which is understandable from the point of Metcalfe's law³³ (the value of a telecommunications network is proportional to the square of the number of connected users of the system), pose a significant threat to the very fabric of social order³⁴ but creation of monopoly or oligopoly is a threat to the market and business itself, especially when, as seen in the case of former president of the United States Donald J. Trump and Twitter, the market is poorly regulated or even deregulated and key decisions are left to private owners of the networks and their *discretionary power* to arbitrary impose certain rules and regulations or to arbitrary break them when it's suits them best. Problem with networked monopolies is that, once the access to the network is denied, for whatever reason, there is no equally valuable provider with the same or similar bid. For example, once one's account is forbidden on Twitter, a network predominantly used by public figures and elites to communicate with each other's and their followers, which in turn enables them to exclude intermediaries (mass-media system), there is at the present moment, no better network to replace the loss.

Social network sites (SNS) driven communication leads to many other fallacies such as creation of the echo-chambers³⁵ in which users surround them self with mostly likeminded individuals and their views and beliefs are inflated and reaffirmed. Combined with the personalized algorithms that present users with different versions of their SNS's newsfeeds it could cause that everyone is getting different information about world around them or at least not providing opposite views which could lead to further distrust of the public sphere mediators

²⁷ CURRAN, J. (2012). Reinterpreting the internet. In *Misunderstanding the internet* (pp. 9-39). Routledge.

²⁸ SHIRKY, C. (2009) *Here Comes Everybody: The Power of Organizing Without Organizations*. Penguin Press

²⁹ PARKER G. G. – VAN ALSTYNE, M. W. – CHOUDARY, S. P. (2016): *Platform Revolution: How Networked Markets Are Transforming the Economy? and How to Make Them Work for You*.

³⁰ BRANTS, K. (2013): Trust, Cynicism and Responsiveness. in *Rethinking journalism: Trust and participation in a transformed news landscape*. Routledge

³¹ NORRIS, P. (2011): *Democratic deficit: Critical citizens revisited*. Cambridge University Press

³² NEWMAN, N. et al. (2016): *Digital News Report, Survey Report*. Reuters Institute Digital News Report. Oxford

³³ HENDLER, J. – GOLBECK, J. (2008): Metcalfe's law, Web 2.0, and the Semantic Web. *Journal of Web Semantics*, 6(1), 14-20.

³⁴ FUKUYAMA, F. – RICHMAN, B. – GOEL, A. (2021): How to save democracy from technology: ending big tech's information monopoly. *Foreign Aff.*, 100, 98.

³⁵ CINELLI, M. et al. (2021): The echo chamber effect on social media. *Proceedings of the National Academy of Sciences*, 118(9)

and create realities filled with fake or misleading information³⁶ Shearmur,³⁷ through examination of perspectives of Putnam, Popper and others conclude that what seemed to be one of the greatest advantages of internet – connectivity and cooperation – is to extent degrading same processes in the real world because satisfying those needs in virtual space is replacing meeting people in various interactions, activities and collectives and that sequentially reduce exposure not only to other people but also to their worldviews in broadest sense. It also reduces the possibility that one’s view, values and ideas are socially tested and contested which is essential for any meaningful discussion in the public sphere. Furthermore, when discussion is transferred into digital sphere³⁸ it tends to be more uncivilized and comments tend to be more harmful compared to face-to-face communication, possibly because in digital forms communicators don’t see a person but their digital identity, one that lacks many if not all non-verbal and other expressions used to mediate face-to-face interpersonal conversation.

Additionally, digital identities could be temporary or presenting fake identities or multiple and that reduce the concern of later social repercussion that often mediate the behavior of the individuals involved in real life interactions. When almost only indicator used to value online behavior (in every sense) is number of interactions and number of profiles whose data can be sold to advertisers, such an environment not only enables but enhances all forms of inappropriate and unacceptable interactions.

Lastly, net neutrality is another problem that could arise with increase of strictly market approach to the digital domain causing not only monopolies and oligopolies that users can’t avoid (due to Metcalfe’s law), but limiting those in inferior economic state to even participate in the networked life, as Economides and Tåg³⁹ point out. Bandura and Walters⁴⁰ explained what a devastating impact to society a limited access to knowledge (and to information, especially in information age) could have and applied on global scale exclusion from the global monopoly network of any sort would only deepen the gap between the *haves and have nots* and further boost inequality but also all sort of societal problem arising from such an exclusion: shrinking business, education, communication and other opportunities (including gradual dissolving of any public sphere) for a significant number of planet’ population in a moment when global cooperation in solving global problems is not only desirable, but indeed essential to surviving of the human race and present ecosystem.

3 Metaverse and the society

At this moment not one of the mentioned virtual reality micro cosmoses have reach a critical point regarding the number of users nor is the access technology widely penetrated into society on a global or any national level but in the foreseeable future arise of one of the virtual worlds to a position that *OASIS* has in Ready Player One is not unfounded. Thus, answers to the question of the future of business and communication in some prospective 3D world shall be based on pondering theoretical assumptions and research findings presented in previous chapters.

Foremost, the question if the Metaverse is to be perceived as real is answered by social interaction perspective and the clear answer is yes, as long as their users perceive it as real or at

³⁶ ALLCOTT, H. – GENTZKOW, M. (2017): Social media and fake news in the 2016 election. *Journal of economic perspectives*, 31(2), 211-36.

³⁷ SHEARMUR, J. (2022): Knowing alone? <https://ideje.hr/>

³⁸ ANDERSON, A. et al. (2014): The “nasty effect:” Online incivility and risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication*, 19, 373-387

³⁹ ECONOMIDES, N. – TÅG, J. (2012): Network neutrality on the Internet: A two-sided market analysis. *Information Economics and Policy*, 24(2), 91-104.

⁴⁰ BANDURA, A. – WALTERS, R. H. (1977): *Social learning theory* (Vol. 1). Prentice Hall

public sphere. With the rise of mass media, the public sphere, previously predominantly conducted in physical spaces of public squares and saloons, transformed into a media sphere where negotiation was conducted through edited – and gated – conversations between the public and the elites in the position of power. McQuail¹⁷ warns that in the media sphere, one of the key obligations of mass media is to, among others, reinforce the strength of and trust in the social order and social institutions. However, market approach to mass media gradually erased the thin lines between the topics of public interest and insights into private life of the individuals with the public image or of the public interest and that drove to the expansion of private or semi-private content into the media sphere which, in turn, bury the discussion on important issues concerning interplay of agency and structure. Fiske and Hartley¹⁸ revealed that the majority of the British TV viewers classified BBC program as garbage in the 1976 although the British public broadcaster was and still is a role model of how a public media should operate. Deterioration of public sphere became even more obvious after Reagan (and Thatcher in UK) deregulations of media¹⁹ and enhanced slow but steady introduction of various infotainment formats. This, consequently, led to further decline in trust of the media but trust in other social institutions remained relatively strong.²⁰ Habermas' line of thinking comes from a critical perspective in which one of the crucial question is ownership of the 'means of production', whether in the sphere of economy as explained by Marx or language as explained by for example Hall.²¹

McLuhan²² claims, following perspective of technological determinism, that not only a medium of conversation impacts the negotiation process but impacts the society as a whole and the way individuals understand the world they are living in and consequently social institution they build are in direct connection to the main media of communication within society. Although his theories are often disputed,²³ Levinson²⁴ showed that his predictions were correct to some degree, especially concerning the digital era and the rise of digital media.

Finally, another important perspective that explains connection between the trust and society is symbolic interactionism celebrated by Blummer and Mead²⁵ states that people live in symbolic universes, mediated through language they use to explain the world both inside and outside their heads. By this approach every social institution and every individual is a mental, symbolic construct and trust in the construct is key ingredient of all human activities with multiple scholars following their work stating in various ways that even if something is, in hindsight, proven wrong, the effects of believing that something is real is real in its consequences in all aspects of individual and societal life.

2 Digital and the society

Miller and Horst²⁶ define the digital as everything that is produced by or could be reduced to a binary code which means that, in present state of the technology it's possible to a certain degree of accuracy and precision, to create or recreate in digital spaces almost

¹⁷ MCQUAIL, D. (2010): *McQuail's Mass Communication*, Sage.

¹⁸ FISKE, J. (2004): *Reading television*. Routledge.

¹⁹ HOLT, J. (2011): *Empires of entertainment: Media industries and the politics of deregulation, 1980-1996*. Rutgers University Press.

²⁰ LA PORTA, R. (1996): *Trust in large organizations*. National Bureau of Economic Research

²¹ HALL, S. (2020): *The work of representation*. In *The Applied Theatre Reader* (pp. 74-76). Routledge.

²² MCLUHAN, M. (1994): *Understanding media: The extensions of man*. MIT press.

²³ MARCHESSAULT, J. (2004): *Marshall McLuhan*. Sage, p. 51.

²⁴ LEVINSON (2003): *Digital McLuhan: A guide to the information millennium*. Routledge.

²⁵ BLUMER, H. (1986): *Symbolic interactionism: Perspective and method*. Univ of California Press.

²⁶ MILLER, D. – HORST, H. A. (2012): *The digital and the human: A prospectus for digital anthropology*. Digital anthropology, p. 3.

least until its users are willing to suspend their disbelief,⁴¹ a phenomenon observed in many virtual or symbolic settings. Therein, their actions in the Metaverse shall have consequences in a real world and open possibilities for both business and communication, as well as any other use or gratification users may gain through the interactions. If similar trends from the contemporary internet research hold, and based on Metcalfe's law, the world providing most possibilities for connections with other users and thus probably the Metaverse with largest number of users shall gain a foothold but in order to gain a monopolistic status it should probably offer enough reasons to stay inside its immersive interface providing (if online behavior of present days internet users⁴² is any indicator of potential future activities) various information and learning abilities, news about events that shouldn't be missed, ways to interact with family and friends, to meet other people and to be entertained.

Transfer of everyday activities into Metaverse shall probably disrupt many of the real life social institutions since there would cease a need for them in a real world, which is in terms with Giddens Structuration theory. Change in the medium of negotiation and change of resources shall require new social institutions to be produced in order to satisfy arising agency and connectivity. This process, however, shall further destabilize existing social institutions on all levels of regulation forecasting a need to establish a space for negotiation both between the Metaverse owners and its users as well as between Metaverse owners and the national and supranational institutions on various topics reaching from infrastructure neutrality to control and ownership of digital production to regulation of digital identities and consequences of the actions of those entities both in digital and material world.

Establishing a public sphere inside the Metaverse, especially when it reaches critical mass of users that will use it as an everyday source for information, could not be left to the initiative of the sole owners of the Metaverse and mechanism for content control should be established by external entities particularly if engagement remains only or one of the few performance and market indicators. Facilitating negotiation and forming communication conditions that respect individual freedom but also individual rights to privacy and protection is important in avoiding tyranny and any forms of autocracy or self-serving tendencies of the individuals in the position of power. Furthermore, type of the content, ownership of it, access to it and sharing of earnings from it should also be considered as one of the key topics for discussion.

4 Conclusion

In conclusion, Metaverse could heighten further divisions between those who are prepared for the expected technological advancements and those who are excise and afraid to use it: ones and zeros – to use McLuhanesque comparison. Internet, and any future variations of it in digital space must be regarded as critical – not only communication but social – infrastructure and there should be an urgent need to regulate it in order to enable it to retain its public purpose and should not be left to exclusively market principles. Once it becomes not only a space for everyday interactions but the space that exclusion from means a social death, in order to avoid real life dangers and disorder, a new social contract needs to be negotiated and access granted to every citizen of the Earth under the same conditions. Global institutions strong enough to enforce such an accord are yet to be built and global cooperation on the matter yet to be establish but without it, as theory and research suggest, human race is facing further alienation, separation and possibly revolutions that could lead to decline of the civilization levels reached with the introduction of digital technologies.

⁴¹ BÖCKING, S. (2008): Suspension of disbelief. The international encyclopedia of communication.

⁴² KEMP, S. (2021): Digital 2021: Global overview report.

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