Sorting the metaverse out and how metaverse is sorting us out 1

Preprint of Huvila, I. Sorting the metaverse out and how metaverse is sorting us out Power, D. & Teigland, R. (Eds.) The Immersive Internet: Reflections on the Entangling of

the Virtual with Society, Politics and the Economy, Palgrave MacMillan, 2013, 192-203.

Running head: SORTING THE METAVERSE OUT AND HOW METAVERSE IS SORTING US OUT

Sorting the metaverse out and how metaverse is sorting us out

Isto Huvila

Department of ALM, Uppsala University

Sorting the metaverse out and how metaverse is sorting us out 2

## Sorting the metaverse out and how metaverse is sorting us out

The idea of the virtual realities and metaverse as an ultimate form of information carrier is as old as the idea of immersive technologically mediated experience. The consequences of a cognitively unlimited access to information and enhanced capability to know and experience our surroundings have been perceived both in utopian and dystopian terms, but the basic capacity of virtual realities and of the broader metaversal reality to integrate man with information (1993) has been often cited as a plain practicable fact (Bouchlaghem et al., 1996; Soon et al., 1999). This essentially instrumental point of view has been suggested to reduce metaverse to a tool (or a medium) and the act of integrating human-beings with information to an essentially solvable technical problem.

Besides generic references to authors like Marshall McLuhan, Geoffrey Bowker and Susan Star, there has been conspicuously little explicit discussion about the precise social, cognitive and cultural processes of how metaverse is functioning as a carrier and category of information and experiences, and even less on how the convergence that directs towards a virtually enhanced reality links back to the two converging worlds. Is it that the virtual ceases to be virtual and the physical will be no more physical? Or does the physical become more than physical and the virtual more than virtual? Are my friends in virtual worlds farther away or closer to me than my physical friends? Does a photograph become different if it is used as a visual overlay in an augmented reality? Are virtual worlds closer to my home than my neighbours? What is a non-metaversal reality (or does it exist)?

This chapter discusses a phenomenon that may be called double-immersion. It is the process how cyberspatial presence changes our experience of non-metaversal aspects of reality. Immersion in an enhanced reality is affecting the ways we are present in timespace, how we categorise and structure the world, and how we are informed and become knowledgeable. Information is not something we can observe *per se*. Similarly we may be unable to know and make sense of the reality *as is*. The reality becomes a metaversal

reality that is structured according to a set of metaversal categories. The aim of this chapter is to look critically into how metaverse is both a category and classification system, and how it may affect our capabilities and perspectives of knowing how things are related to each other, what these things are and how the metaverse changes how we see them. The problem, as it is seen, is that we are easily fascinated by the utopian possibilities of the metaverse (i.e. how metaverse can help us) and at the same time incapable of adapting us to the new environment (i.e. how we have to change our behaviour to adapt to the metaverse).

## Categories and their consequences

Citing the words of Eviatar Zerubavel (1991), the social order and the way how we gestalt the world is based on drawing "fine lines". The act of making distinctions of kin and non-kin, allowed and forbidden or here and there are a fundamental part of human experience. It makes very fundamental sense to make a distinction between young and old, male and female, the ethnicity of people, or the color of your and your brother's socks. The categories and categorising have a propensity to turn into hierarchies and become instruments of power, but the various consequences of classifications do not negate their fundamental function to help us to make sense (both in passive and active meanings) of the world. Further, using again a wording of Zerubavel, we need to create "insular" entities of things in order to make sense of the reality. In terms of Johan Huizinga (1949), these small worlds that are delineated from the rest of the experienced reality have a capability to form "magic circles" that keep individuals within a particular frame of reference. The insular categories can overlap in a sense that different aspects of life are often framed on specific islands of meaning. The appreciations of certain phenomena in the context of work or leisure, here or there, or us or them may be entirely different from each other. The distinctions of virtual and actual, or virtual and real, digital and analogue or metaverse

and physically based reality are not different from the general pattern of classifying the reality. They are attempts to frame and understand the aspects of reality we are experiencing in our everyday life and imagination. The act of drawing these lines protects us from anomalies, things that does not fit into our understanding of the reality. Even if the metaverse is seemingly quite remote from the traditional ideas of taboos, the acts of drawing fine lines between virtual, metaversal and physically based realities are highly similar to the processes described by Mary Douglas (1966) in her classical study of the conceptions of pollution and taboo.

Besides functioning as contexts of understanding the reality, the islands of meaning are shaping it as well. Each individual "island of meaning" (Zerubavel, 1991) incorporates its own mode of experiencing the reality, own rules and an own context of understanding how things are related to each other and what is their fundamental meaning and role as a part of our experiences. The division of reality is not only an act of rendering visible some existing lines of distinction but also of drawing new lines. This is true to every attempt to label things and organise them in categories as Geoffrey Bowker and Susan Star (2000) have described in their account of three widely different case studies of classification and its consequences. Classifications change the way how we perceive the reality, but at the same time, the drawing of a line makes a difference in the reality. Feminist scholars have placed frequent emphasis on how traditional male dominated social and intellectual categorisations have marginalised women (Olson, 2002) and other non-dominant groups in the society. The categorisation of men's and women's duties at home and in the society have had a considerable effect on the women's possibility to educate themselves and choose of career of their liking. In a similar manner, the categorisations have changed the digital sphere. One of the most longest standing disputes pertains to the labeling of things as 'only games' and related belittling connotations attached to the notion of gameplay. The contrasting viewpoints emphasise on one hand, the seriousness and relevance of games and

the predominance of gameplay in all human activity, or on the other, the impropriety of labeling certain phenomenon such as "social virtual worlds" as games (Bell et al., 2010). The both interpretations may be contested, but it is apparent that "game" or "metaverse" are not especially useful as merely evaluative, non-analytical or descriptive categories.

Another example of the power of categorisations is how classification of web services as similar to certain others have had a major, in some cases, fatal effect on their popularity. For instance, in the case of the late Google Lively, the early popular expectations to see the service as a Second Life 'killer' were an obvious factor that contributed to negative reviews and eventual closedown of the service. Similarly, the positive reputation of individual companies can help services and technologies to be categorised as useful and successful, and consequently, to flourish beyond their technical or social excellence.

The active role of categorisations in the processes of shaping the reality is coupled to the influence of the premises of classification. Not only the act of labelling something as a game, but also the system of categories, which includes a particular notion affects the formation of the archipelago of the islands of meaning. Formal semantics based universalist classification systems have a tendency to highlight rigid all-embracing categorisation of things (Almeida et al., 2011) while faceted systems tend to prioritise a more complex view of categories and the relatedness of individual entities. Seeing the metaverse as a faceted system of various related aspects leads to a very different idea of the phenomenon than a bipolar division of things to belonging to the sphere of metaverse or not. Complexity can be an asset in the context of such a multidimensional concept as metaverse (similarly as with the notion of game (Mäyrä, 2008)) and a way to retain a certain productive cacophony of viewpoints instead of simplifying the notion by assuming a single master theory. However, in the end, all categorisations are a question of drawing a supposedly uncontroversial line that demarcates the borders between individual islands of meaning. The major difference between the two approaches is, however, the difference in how the shaping of a border and defining the anomalous is performed.

The final consequence of the assumption of the prescriptiveness of categorisations is an ultimate denial of absolute miscellaneity. David Weinberger (2007) has argued that in the age of digital information everything is miscellaneous. He is undoubtedly correct on a principal level. Digital systems give us opportunities to make and support an endless variety of different types of orders of things. At the same time, however, the possibility of infinity does not equate with a practical equality of every categorisation. Even if the digital systems would allow us to demarcate according to our own will, the practices of drawing fine lines are related to preferences that are stronger than the opportunity of miscellaneity. The physical reality and order of things has an impact on the digital reality and the outlines of the metaverse. Even if the social reality can be very different in virtual worlds than in the physically based reality, they are not completely detached (Huvila et al., 2010).

## Metaverse as a category

The large part of the metaverse related literature has followed a close-to-Baudrillardian (Baudrillard, 1996) logic of perceiving the notion of virtual and its manifestation as a metaverse as something 'different'. Not all have, however, shared his or Neal Stephenson's dystopian visions of the outcomes of digital realities. In contrast, the metaverse may be claimed to be a predominately positive species of a virtual form of the reality. The difference of metaverse is a necessary precondition of creating and maintaining such a category and demarcating it from others forms of digital and analog spheres.

As a distinct category, metaverse has its own set of rules and references. Metaverse transforms its participants to characters that are not fictional as in a fictional theatre piece, but very fundamentally different individuals than their physical representants. In the scholarly and popular discourse, metaverse forms its own peculiar island of meaning in the sense described in the work of Zerubavel. A metaphorical sea separates it from other islands and especially from the contrasting part of reality outside the digital sphere.

As a category, metaverse is an attempt to bring order into the anomalous field of digital forms of reality. Besides referring to a particular service based on a certain data communications protocol known as HTTP, the World Wide Web and the more recent and by far less unanimous concepts of Web 2.0, 'social media', virtual reality or virtual worlds are similar categories as the metaverse. The metaverse has emerged as a meta-category within which wildly different digital contexts are not apparently anomalous to each other, and consequently, they can be be less dangerous to our individual and collective self-understanding. In the sense of Douglas (1966), the notion of metaverse creates a taboo of traversing the boundaries of this new form of insular reality that attempts to bring homogeneity to the heterogeneity of the virtual sphere. Metaverse is a unifying category that brings together virtual worlds and other types of web services to form a thesis of a coherent whole.

#### Metaverse as a classification system

Even if metaverse clearly forms a (relatively) distinct category within the social reality, its insularity is not monolithic. A closer look at the different contexts of metaverse from three-dimensional worlds to text based metaversal realities reveal a sophisticated web of partly similar but at the same time quite distinct islands of meaning. Looking even closer to the web of metaversal context, more and more islands become visible. The concurrence of the metaphor of islands and archipelago used in the virtual world of Second Life and the idea of insularity of social reality discussed by Zerubavel is probably quite unintentional. Interestingly enough, it is capable of shedding light to the order of things in the metaverse.

The heterogeneity of the metaverse reveals an obvious fact that it is not only a category. Is is simultaneously a classification system, an archipelago of the islands of

meaning, and in a sense, very similar to Second Life that is an archipelago of simultaneously somehow similar but very distinct islands (simulators) with their own explicit and implicit rules and norms. A Second Life version of Berlin in the 1920's (http://1920sberlin.com/) is part of the virtual world both technically as an island in the Second Life archipelago and in more abstract terms by sharing characteristics of the 'generic' Second Life experience. At the same time, it presents residents with a distinct set of rules and categories that are very different from an average Second Life experience and sets a stage for an entire different shaping and reshaping of meanings. The similar kind of synthesis of the general and particular applies to the most of the contexts in Second Life. Some projects place more emphasis on particularity while others aim at "going native" in the virtual world.

The rules and categories of metaversal realities represent distinct modes of expression in these contexts. They function in a largely similar manner that the categories in other types of classification systems. Lev Manovich (2001) discerned and described the ascent of a peculiar language of the cinema in the early 20th century and proposed the emergence of a novel language of new media based on the informationalisation and databasification of media. Similarly to his work on earlier forms of media, it is possible to conceive that the metaverse produces its own language that shares some characteristics of the new media described by Manovich, but incorporates things that have emerged during the decade following the publication of his work and have become distinct for the particular context of metaverse.

A Manovichian theorisation of the metaverse seems to suggest that the classificatory and categorical language of metaverse is a language of that what metaverse is, how it functions and how it is perceived. The language stems from the general and the particular in the metaversal landscape. Places within individual contexts such as Second Life are compared to other places within the same virtual world. At the same time, Second Life is compared to other virtual worlds and vice versa. Even if it is only a single metaversal context, Second Life is in many ways central to the notion of metaverse. Due to its relative popularity at the time and a capability to capture the public imagination as one of the first widely popular 'generic' virtual worlds, it has become and remained a benchmark of colloquial metaversal conjecture by the time of this writing. The possibility and relative easiness of constructing three dimensional artefacts in Second Life has become a metaversal assumption. The same functionality is assumed of other quasi-similar virtual worlds, and if the particular functionality is missing, it is a distinct feature of the particular environment. As Pearce (2010) notes, however, Second Life is a very artificial benchmark. Even if it has captured the imagination of the media and researchers, it is not the largest virtual world or the only approach to operationalise the notion of metaverse. A metaverse according to Second Life becomes a "tyranny of majority" (Pearce & Artemesia, 2010), or even if Second Life would not represent the majority, a simplification of the metaversal diversity. Even if simplifications are inevitable and, as discussed earlier, a fundamental aspect of the human existence, a language of metaverse defined according to a particular system is counterproductive to the intrinsic emphasis of complexity of the very notion.

Considering the diverse and often rather inconclusive definitions of the metaverse, it is not an entirely uncontroversial concept. Metaversal (sic!) definitions of the metaverse tend to underline the convergence of the virtual and augmented realities and the Internet, and place specific emphasis on embodiment, sociality, communication and interaction (Forte & Kurillo, 2010). Metaverse is also attached with ideals of enhanced visual production and reproduction of entities, contextualisation and social presence (Lombardi & Lombardi, 2010) and an aspiration to see metaverse as a context for (Manovichian) language of social and cognitive enhancement with an attempt to realise the cybernetic vision of the convergence of technological and human systems (Vita-More, 2010). It is apparent that metaverse is difficult to describe, to say nothing of defining the term. The fluidity of the language of metaverse is not, however, necessarily a significant problem. The analytical relevance of acknowledging that metaverse has an implicit and explicit classificatory potential is a more significant observation than a futile attempt to seize upon a possibly relevant master theory.

# Becoming double-immersed?

It sounds like a grand understatement to call the metaverse just an ordinary medium or tool. Yet, the instrumentalist viewpoint is essentially correct in that the metaverse is as ordinary as a medium or tool can be. The challenge is that nothing is ordinary until it has made us to perceive itself as a commonplace. Books were once truly extraordinary objects. Telephones were similarly peculiar only a few decades ago. In this sense, like any other mediator of information and experiences, the metaverse is a tool. But as all tools including books and telephones, the metaverse has consequences on how we perceive things and how we make things to be. If we learn things in the metaverse, we learn them in a metaverse way. If we are informed, the metaverse *is* the way we are being informed. If we are participating in the metaverse, metaverse becomes a category that influences how we perceive the reality and how the different aspects of reality are related to each other when it is appropriated (in quasi-Heideggerian sense, Heidegger, 2001) as an instrument of social life.

The metaverse is hardly going to be the single frame of reference for the human experience, but precisely because of that it is very easy to get lost in the metaversal illusion. We might think that an observation is plain and information is that what we were looking for without realising the presence and consequences of an metaversal intervention. Besides being descriptive of the perceived similarities between various forms of virtual worlds, augmented reality and Internet services, the notion of metaverse makes us assume and perceive further semblance. At the same time, the convergence of categories affect our expectations of the functioning of the non-augmented forms of reality when the digital and physical realms do not converge. Yet the utopian (or dystopian) tendencies related to the notion of metaverse do not revoke its capability to penetrate to the world of that what is expected. Metaverse does not have to be fully realised to have an impact on our experience of the ordinary.

The evolution of the Internet and transition of services from physical desks and telephone lines to the web has not only opened up new opportunities to interact with information in the context of various public and commercial services. At the same time, the emergence of new services has lead to phasing out of older modes of communication and interaction. A significant issue in the development of virtual worlds has been the lack of physical world affordances in the virtual milieu. In practice, the virtual worlds have been interpreted within the frame of the category of physically based reality or at least as a category that resides on an island of meaning that is not quite distinct from the physical world. In virtual worlds, the fine line was drawn far beyond the capabilities of the contemporary technologies to make a desired kind of distinction.

In contrast to the intuition and fierce attempts to define metaverse, as related and unrelated to the physically based reality, the aspirations to develop classifications of virtual worlds and to describe the phenomenon of virtuality, it is not given that the fine line will be drawn between metaverse and the physically based reality at all. Raine Koskimaa (2002) observed that the notion of 'digital culture' was becoming extinct already a decade ago. Digitality was on the verge of turning to a self-evident part of the social life and making 'digital' to a gratuitous attribute in conjunction with the notion of culture. Similarly, at the present, the metaverse (as an intersection of virtual and augmented spheres) is becoming an organic part of the structures and practices of everyday life. However, the fact that both 'digitality' and 'metaverse' are becoming too colloquial notions to mention, demonstrates their significance in the contemporary culture. Precisely because the convergence of the metaversal and non-metaversal parts of the reality make them difficult to distinguish from each other, a closer look at the metaverse as a category and a classificatory principle can provide insights into the changes in the contemporary techno-social landscape.

The effect of the emergence of metaversal categories and islands of meaning that are induced by the colloquiality of metaversal categories in the everyday life can be described as *double immersion*. We become immersed not only in the context of metaversal reality (in the convergent reality formed by digital contexts) but also in the representations and projections of metaverse in the physical reality. One of the early examples of digital double immersion was the effect of personal GPS navigators. Inexperienced yachtsmen wrecked their boats on clearly visible rocks and shores when they trusted their navigator more than their own capability to navigate properly. Possessing a portable navigator transferred an individual into an exact position in a virtual world defined by a global map. When technology functions, people are able to transverse physically based reality in a metaverse without being especially observant of their physical surroundings. When technology fails, an individual is thrown back into an unknown physical reality without a capability to navigate to the target. When the virtual world differs from the physically based reality, a poor yachtsman runs into the rocks that are in a different position in a virtual world than in the physically based reality.

Celia Pearce (Pearce & Artemesia, 2009) describes another case of double immersion. The members of the The Gathering of Uru gaming community joined together at a physically based meeting of the community and began to reproduce their in-game collective behavioural patterns in the physical environment. The community members transformed a hotel lobby in to a play space and began to play together a game usually played in their virtual world. The partiality of the translation became immanent in that in the physically based reality, the context did not provide automated tools for keeping track of scores in the game. In the absence of an automatic scorekeeping, the functionality of the metaversal reality was replaced by a proxy, the husband of the one of the players. The result may be described as a physical immersion in the digital context, a double immersion in the metaverse. Patterns of being together in a digital environment affected social intercourse in the physical reality that was in the end augmented by a physical replica of a digital affordance. The translations of the practices and gestures stretched the social texture over metaversal boundaries.

Double immersion is also present the partly playful comments on the inconvenience of being incapable of teleporting between two locations in physically based reality in a similar manner it is done in many virtual worlds. Even if the contemporary impossibility to teleport in the physical reality is acknowledged as a 'fact', the concept of teleporting is a similar fact that underlines our limitations to act freely. The 'why not' is a consequence of a double immersion in the metaverse and back in the physically based reality. Finally, a similar sense of powerlessness can be felt in the sense of difficulty of communicating outside the reach of an Internet connection. The lack of access to the customary social networks and email has become a handicap. Even if the consequences of not being on line would be minimal, it is easily sensed as an impairment.

The effect of a double immersion is twofold. It is an indication that a category is becoming dominant in the sphere of colloquial experiences and it has begun to loose its significance as a particular island of meaning in the contemporary society. At the same time, double immersion means that a category has become a classification system of its own right. The convergence of the bipolar effect provides a practicable context and a language for discussing and describing the phenomena of everyday life. It is an instrument for drawing fine lines to shape new islands of meaning. Metaverse does not end the existence of the categories of virtual or physical. In a sense, it makes them both something else, albeit hardly 'more', than they are at the present.

The double immersion is undoubtedly a real phenomenon, but it is equally apparent that there is no absolute form of a twofold presence in two categories of reality. For part of the discourse, metaverse remains a category that separates it from other categories, but at the same time, it can be used consciously to pinpoint the essence and structures of the both in and outside of that what is assumed to be metaversal. The new language forms islands of meaning by drawing fine lines that traverse both metaverse and non-metaverse. The translation is not direct, but the language seems to be capable of assuming forms that function to bring together aspects from the different contexts of human experience. Double immersion may perhaps be seen both as a cause and consequence of something that Celia Pearce describes as the increasing difficulty of socialising in the physically based reality (Pearce & Artemesia, 2009, p. 191). The category of metaverse exists as a meaningful entity, but at the same time the twofold translation complicates any attempt to make a real distinction. There is still a metaverse and a non-metaverse. The transformation is not translation or reflection, and indeed, a photograph or a gesture becomes different when it is mediated to the metaverse and back. It is impossible to make sense of things and know separately in the metaverse and outside of its boundaries. The outcome is not an emergence of the two realities. Rather, double immersion has made it easier to socialise and categorise reality according to an entire new set of insular realities that are convergent outcomes of the interlinking of the metaverse and physically based reality.

# References

- Almeida, M., Souza, R., & Fonseca, F. (2011). Semantics in the Semantic Web: A Critical Evaluation. *Knowledge Organization*, 38(3), 187–203.
- Baudrillard, J. (1996). Simulacra and simulation. Ann Arbor: University of Michigan Press.

- Bell, M. W., Smith-Robbins, S., & Withnail, G. (2010). This is Not a Game: Social Virtual Worlds, Fun, and Learning. *Researching Learning in Virtual Worlds*, 177–191.
- Bouchlaghem, N., Thorpe, A., & Liyanage, I. G. (1996). Virtual Reality Applications in the UK's Construction Industry. In Z. Turk (Ed.), Construction on the information highway. CIB proceedings, May 1996, University of Ljubljana, Slovenia.
- Bowker, G. C., & Star, S. L. (2000). Sorting things out: classification and its consequences. Cambridge, MA: MIT Press.
- Douglas, M. (1966). Purity and danger; an analysis of concepts of pollution and taboo. New York: Praeger.
- Forte, M., & Kurillo, G. (2010). Cyber-archaeology and metaverse collaborative systems. Metaverse Creativity, 1(1), 7–19.
- Heidegger, M. (2001). Poetry, language, thought. New York: Perennical Classics.
- Huizinga, J. (1949). Homo ludens : a study of the play-element in culture. London: Routledge.
- Huvila, I., Holmberg, K., Ek, S., & Widén-Wulff, G. (2010). Social Capital in Second Life. Online Information Review, 34(2), 295–316. doi: http://dx.doi.org/10.1108/14684521011037007
- Koskimaa, R. (2002). Digitaalinen kulttuuri. Agricolan Tietosanomat(1). Retrieved from http://agricola.utu.fi/tietosanomat/numero1-02/digikulttuuri.html
- Lombardi, J., & Lombardi, M. (2010). Opening the Metaverse. Online Worlds: Convergence of the Real and the Virtual, 111–122. doi: 10.1007/978-1-84882-825-4 9
- Manovich, L. (2001). *The Language of New Media*. Cambridge, MA and London: MIT Press.

- Mäyrä, F. (2008). An Introduction to game studies: Games in culture. London: Sage.
- Olson, H. A. (2002). The power to name: locating the limits of subject representation in libraries. Dordrecht and Boston: Kluwer.
- Pearce, C., & Artemesia. (2009). Communities of Play Emergent Cultures in Multiplayer Games and Virtual Worlds. Cambridge, MA: MIT Press.
- Pearce, C., & Artemesia. (2010). The Diasporic Game Community: Trans-Ludic Cultures and Latitudinal Research Across Multiple Games and Virtual Worlds. In
  W. S. Bainbridge (Ed.), Online worlds: Convergence of the real and the virtual (pp. 43-56). Springer London. Retrieved from http://www.springerlink.com/content/qt13668h8v405285/ doi: 10.1007/978-1-84882-825-4 4
- Soon, T. H., Hong, L. K., & Kuen, K. K. (1999). VR Telerobot System. In Proceedings of the 5th international conference on manufacturing technology (icmt1999).
- Vita-More, N. (2010). Epoch of plasticity: The metaverse as a vehicle for cognitive enhancement. *Metaverse Creativity*, 1(1), 69–80. doi: 10.1386/mvcr.1.1.69\_1
- Warwick, K., Gray, J., & D., R. (1993). Virtual Reality in Engineering. London: IEEE.
- Weinberger, D. (2007). Everything is miscellaneous. New York: Times Books.
- Zerubavel, E. (1991). The fine line: making distinctions in everyday life. Chicago: University of Chicago Press.