

Hyperdigitalization of Body: From Physical to Virtual (Indonesian Online Gamers Context)

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Abstract. This writing aims to identify hyperdigitalization of body in online gaming world. Social perspectives are centered on the effects of using digital media on the body, but most studies tend to focus on health issues. Most biodigital studies are found, which see the body from the perspective of Biology and Health. Other studies from a demographic perspective is also found, such as, the relation between the use of information and communication technology (ITC) and the body. The previous study is about digital body as the horcrux of extended-self in post-human era. The study identified what is (social) digital body definition. It is based on one's media social activities. Yet, there is no research found about digital body in other media such as online game as a virtual reality. Frameworks used are Baudrillard's Hyperreality and concepts of digital body, avatar, second-self, game and online gaming. This research is a preliminary research which adopts the qualitative approach, relying primarily on previous research on online gamers and digital body and personal interview to some gamers with body issue. The conclusion is the online gamer body has undergone a physical body process into a virtual body in phases: (1). Physical body, (2). Simulation Body; (3). Digital Body, and (4). Virtual Body. This process namely as hyperdigitalization of body, which can be interpreted as a process of the body being hyper digital. This research also define the characteristics of online game avatar as: Controlled-Dematerialized Self, Re-embodiment Self, Social-Supportive Self, In-Group Oriented Self, and Cosmopolitan-self.

Keywords: Hyperdigitalization; Digital Body; Virtual Body; Avatar Online Game

1 Introduction

In the digital era, online games are not just entertainment and activities to fill free time. Online games can also be a social activity that makes players connect and eventually form a community. In 2001, Nexia became the first online game to enter Indonesia. As the first online game, Nexia finally became the pioneer of other online games and in the last 15 years, online games in Indonesia experienced rapid development (Alfarizi, 2018). Based on the latest research results (Trihendrawan, 2018), Indonesia is estimated to have more than 60 million mobile game players (gamers) and is predicted to continue to grow to reach 100 million

players in 2019-2020. Of these, 19.9 million of them are paid online gamers and the average expenditure reaches 9.12 US dollars (US) (Rachmawati, 2018).

At present, Indonesia is ranked 16th in the world as the country with the most active game players (Saputra, 2018) and Indonesia is listed as a country that has many online game players who follow Massively Multiplayer Online Role-Playing Games (MMORPG). MMORPG players must basically always build their digital characters to play online. This character formation is related to the personal identity that will be built in the character of online games. Because MMORPGs are games that are multiplayer massively, then the players are coming from many countries. The MMORPG players are part of gamers all over the world. There are hundreds or even thousands of players interacting in MMORPGs. It is beyond countries' borders and cultures. Their interactions are bridged by the chat feature. Interactions carried out are based on various kinds of motivations such as to make friends, complete missions, and exchange items, etc. Why is MMORPG so interesting? Because this industry is not a small industry in terms of income. A registered online game player can have revenues of US \$ 500,000 - from online games (Fajar, 2015), which is equivalent to 7 billion rupiah. The global game industry research institute, Newzoo, state that the Indonesian gaming market has around 43.7 million gamers and has the potential to generate revenues of up to USD 880 million for the industry in 2017 (Nurhayat, 2018). Brief explanation of the development of the internet to online games in Indonesia above, making new studies of online games currently very relevant for Indonesia.

The Massively Multiplayer Online Gaming Phenomenon and its relation to the digital body are interesting things to discuss. In searching for the digital body issues, there are several forms of study. Most biodigital studies are found, which see the body from the perspective of Biology and Health (see <https://www.biodigital.com/>; Johnstone et al, 2008) and computer program in neuroscience (Slater, 2018). In addition, the use of technology in the body such as body scanners was also found (Allen et. Al, 2002; Percoco, 2011). Other studies from a demographic perspective, for example, see the relation between the use of information and communication technology (ITC) and the body (see Huang & Yabiku, 2018). Study about The Body in Digital Animation also found in cinema studies (see Gadassik, 2010; Carden, 2021; Jewitt et.al, 2016; Teplika, 2010). Social perspectives are centered on the effects of using digital media on the body, but most studies tend to focus on health issues and computer animation or cinema studies. There is one in sociology of bodies, but focus on body image (Kudaibergenova, 2019) or cybersexuality (Lunceford, 1999). The previous study is about digital body as the horcrux of extended-self in post-human era. The study identified what is (social) digital body definition. It is based on one's media social activities. Yet, there is no reseach found about digital body in other media such as online game.

Digital body become one of interesting topic when we focus on online gamers with disability. In some cases, video games help people cope with disabilities (Miller, 2019). Some viral phenomena about the digital body form of online gamer, one of which is the case of Mats Steen. Mats Steen is an online gamer from Norway. He became an international sensation when the story of his life adorned online news in early February 2019. Actually Mats Steen's extraordinary life story has appeared in several Norwegian media around the end of 2014, but it was only widely circulated after being appointed by bbc.com in early 2019. Mats Steen is an online gamer with disabilities. When he was 4 years old, Mats who often fell, was diagnosed with Duchennes Muscular Dystrophy (DMD); a rare degenerative muscle disease that attacks most boys. This disease results in the Mats muscle being unable to develop normally. Since then, Mats has been wheelchair friendly in his daily activities. Doctors estimate that Mats's age only reaches 20 years, but it turns out that Mats last up to 25 years.

What makes him special? As parents of a person with disabilities, Mats's father and mother, Robert and Trude Steen thought their children only spent days playing computer in their home basement. When Mats died at the age of 25, they were astonished by the many mourners who came and offered condolences. Not only that, those who come not only from Norway, but also from other countries. Apparently, for the last dozen years of his life, without his family knowing, Mats Steen is a famous online gamer. He is known as Lord Ibelin Redmoore (and sometimes Jerome Walker) from Planet Azeroth in the famous online game World of Warcraft.

An interesting case related to this is about a Canadian gamer, Marcus Dickinson, who makes blog content based on his character in the online game "EVE Online", Roc Wieler, and adjusts his body to be in accordance with his Avatar. Usually, Avatar is made as a representation of one's self, but in this case, Dickinson actually adjusts himself to be similar to the Roc Wieler character and "revives" Wieler in the blog he manages (Wilson, 2012). For Dickinson, Roc Wieler is a brand. He has a blog called Roc's Ramblings that he writes for daily as Roc. Brand loyalty is one of the reasons Dickinson first decided to shape up. During his trip to the 2009 "EVE Online" FanFest, real life hit him. Walking into the convention, he didn't feel like Roc. He felt like a stereotypical geek, surrounded by other stereotypical geeks, which made him far away from what he felt as the Roc.

These cases can be viewed as "second-self" phenomena; a hyper re-embodiment of digital bodies carried out by online gamers Avatar in gaming world. This second self was once expressed by Susan De Weger. According to De Weger (2015), the concept of "Second Self" refers to online identity, a virtual life that is lived in parallel with real life. In fact, according to De Weger, it is important to improve our second selves by communicating and promoting work results to gather audiences and support. Although a virtual life that is lived in parallel with real life, the cases above show there are some gamers tend to hyperreal their digital body to something much different from the real one. Therefore, the big question in this study is "how is the process of hyperreal 'digital body' (in online gaming world)?"

Between simulation, simulacrum, and hyperreality is actually a process that cannot be separated. Simulations are positioned as a process of forming representations, while simulacrum is a manifestation of the image of the simulation process so as to give rise to a new world in the form of hyperreality. Jean Baudrillard (1988) describes phases of the image: (1). It is the reflection of a basic reality, (2). it masks and perverts a basic reality, (3). it masks the absence of a basic reality, (4). it bears no relation to any reality whatever: it is its own pure simulacrum. In the first case, the image is a good appearance; the representation is of the order of sacrament. In the second, it is an evil appearance: of the order of malefice. In the third, it plays at being an appearance: it is of the order of sorcery. In the fourth, it is no longer in the order of appearance at all, but of simulation.

Baudrillard (1988) provides an explanation related to the description above that the sign that appears in the first phase is a sign that still displays a completely representative representation without any additional things in the sign. In the second stage the sign has undergone a change in the representation that is in it so that the sign does not display a sign that is completely attached to him. And in the last phase it doesn't display a real representation anymore but a simulation that is attached to him. The transition from the last phase of change to the sign disguises the meaning of a sign that has been attached which ends in the concealment of meaning that is completely attached to a sign. So that when a sign experiences a change in the meaning inherent in itself, it is present only nostalgia for the meaning of a sign. When the real is no longer what it used to be, nostalgia assume its full meaning. There is a proliferation of myths of origin and signs of reality; of second-hand truth, objectivity and

authenticity. There is an escalation of the true, of the lived experience; a resurrection of the figurative where the object and substance have disappeared. And there is a panic-stricken production of the real and the referential, above and parallel to the panic of material production. This is how simulation appears in the phase that concerns us: a strategy of the real, neo-real and hyperreal, whose universal double is a strategy of deterrence.

Hyperreality is 100% consists in the simulation. Hyperreality is not produced but it is always ready to be produced. Strictly speaking, it is a simulation that is more real than the real, more beautiful than the beautiful, truer than the truth itself. In hyperreality, there is no way to get something from the source, then we are sure that the source is the original. A good example is pornography. In the context of hyperreality, Baudrillard views pornography as hypersexual, more sexual than sex. Hyperreality can be seen to be more real than the real itself (Ritzer, 2008). The previous research has established a definition of digital body. Digital body (see Agustin, 2018) is a non-material body containing *Horcruxes*, digital objects of dwelling words and thought, in the form of Digital Data and Avatars, which are Extended-Self in a post-human era with characteristics: *Controlled-Dematerialized Self*, *Hyperreality-Remodiment Self*, *Social-Supportive Self*, *Developed-Extended Self* and *Social-Affiliated Self*. It means the body, due to digital innovations, can be changed and reconstructed like engine-part replacement. The body also can be transformed into a non-material form and reconstructed in digital. It's embedded to data and Avatars as the replacement can be formed or created.

The form of digital body are **Digital data** (photos, choices of music, messages, videos, written words, etc.) and **Avatar**. Digital data is an object that is part of the Self which is then stored virtually in the digital era. With the development of the digital world, one of the characteristics of data is the change in form to non-material. This non-material data is part of the souls of social media users for example because it is associated with social identity and some of them have power as a status symbol. Meanwhile, Avatar is a form of self that is simulated into a digital body, and its existence is sometimes more real than the physical body itself. That is why this simulated body becomes an extended Self because the account's owner feels his simulated identity (Avatar) with himself as the creator of the digital body itself. Lugin, et. al (2015) mentioned that Avatars having (1) Strong resemblance to human, usually with (2) a limited freedom of movement (i.e. participant were required to reproduce a particular movement patterns or simply being immobile), and/or often only (3) partial body tracking. The influence of one important top-down factor, the virtual body realism in terms of visual human resemblance (or Anthropomorphism) has barely been research, especially with natural whole-body interactions.

Susan De Weger (2015) writes about The Second Self to explain more about an online artist. The term 'Second Self' refers to your online identity, to your virtual life lived in parallel to the real world. Cultivating a second self to communicate and promote your work is an inexpensive and dynamic way to build audiences and support. Creating an online portfolio will give you ownership over your artistic identity and allow you to shape the story you want potential supporters or collaborators to see and hear about your work. Most importantly, your second self allows you to maintain a clear distinction between your personal and professional online content. The challenge in creating the second self is to cultivate a voice that feels authentic and will resonate with supporters. In order to achieve this, it's important to take time to evaluate goals. Consider what one's hope to accomplish. It is a clear and unique artist statement that will guide the look and content of all online material.

There are at least three experts who then explain culture in online games (Kerr, 2006). First, Johan Huizinga; a Dutch academic, who emphasized that the game existed before

culture, because various types of games emerged from the community. Ranging from children's games to competitions, role playing, and games that are performed suddenly. Huizinga defines 'playing' as 'voluntary activity or work carried out within certain time and place constraints, according to regulations that are loose but truly binding'. From this understanding, Huizinga at least limits the concept of playing as something out of ordinary life, not related to the desire to obtain material benefits, limited in space and time, bound by rules, voluntary and creating its own social groups. For Huizinga, the game took place in a clearly restricted area. All playing movements and are in the playing field such as arena, card table, stage, screen, and others.

Second, Roger Caillois (2001) defines play as a free and separate activity in space and time. He noted that playing and play can be distinguished from reality through the 'rules' that apply in both contexts. In the game, Caillois limits its six qualifications: freedom, separation (in space and time from outside events), regulation, outcome uncertainty, non-productivity and trust (among players). These six qualifications were later adapted by the makers of online games by adding points: the game category corresponds to the level of payment that follows the rules. Third, Brian Sutton-Smith, who states the form of the game like other cultural forms. Therefore, the game cannot be interpreted neutrally, and it is impossible to separate between existence (players) and their own experiences. Sutton-Smith defines the diversity of games through nine different forms of play: subjective games, solitary games, fun games, informal social games, role play, shows, celebrations and festivals, contests (games and sports), and risky games. In digital technology, there are at least four of the most popular games: solitary games, role playing, informal social, and competition.

Digital game experts then define the game as a 'system in which players engage in artificial conflicts, defined by rules, which produce calculated results'. They followed the Huizinga concept of the game carried out in 'arena' closed to refer to 'the special place and time created by the game'. But in digital games, this closed place or circle can be simultaneously open at the same time. So, in the digital realm, games are defined as something that is 'separate' from reality and operates in rules, influenced by what players do, and is in culture in general. Specifically in the field of communication technology, Marshall McLuhan also wrote a chapter on play and its role in society as Roger Caillois described it in 1964. McLuhan described the game as voluntary activity, which had uncertain results and followed strict regulations. This definition actually follows the definition of media technology, which according to him, is 'an extension of man'. With this definition, McLuhan also shows how technological advancements make the game 'global' and application of popular culture, and also as a distraction from work pressure.

Game Online and Electronic Role-Playing Game

Online games are a convergence form of offline games. The offline game history starts from the game machine first introduced by Dr. Edward Uhler Condon at the New York World's Fair in 1940. However, the game system intended for home commercial use emerged 30 years later, when Ralph Baer and the team introduced the "Brown Box" in 1967. Since then, the development of the game world cannot be stopped. At the end of the 1970s, restaurant chains in the US began to include video games as entertainment in their restaurants. This phenomena then naturally triggers a competitive feeling between game players and the community of game players appears and competes to place themselves in the arcade record (coin game machines that store player scores). This became the beginning of the game community.

Role Playing Game is the form of the game with the most complex narration from other games. The players are in a series of events that are designed as life experiences in the game. In an RPG, the history of the game world is presented and supporting narratives are prepared to complete the details of the game to be played. The "back door" narrative is also presented as a consequence of the players in the game world. In some studies, online role-playing gamers are bound by cosmopolitan culture and cosmopolitan cultural identities (Sunarwinadi, et al., 2017). The identity of cosmopolitan culture is defined as identity connected with cultural groups whose interactions are governed by universal principles that apply globally without being limited by the territory of the country, religious values, organizations or certain age groups. Based on the data, several universal principles that apply in online game play are internalized in the cultural identity of the players and become the cosmopolitan cultural identity of online game players. The principles of the cosmopolitan culture that emerged include: *Competitive Fighting Spirit; Challenge Conquest; Global Organizational Participation; Excitement Popularity Pleasure Satisfaction; Global Homogeneity.*

2 Methodology

This research is a pre-liminary research which adopts the constructionist paradigm with qualitative approach, relying primarily on previous research on online gamers and digital body. This research used in-depth interview as the data collection technique to the subjects with characteristics experienced gamers with physical body issue, such normal body, obesity and deaf gamers. This research held in Jakarta, Indonesia and focus on online gaming context.

3 Result and Discussion

During the digital game was seen as a "playground", it was only regulated by space, time, rules and clear situations with the storyline that had been provided by the game producers, so the existence of the body apart from the game. Games are only seen as a tool for the body to engage in an artificial conflict defined by regulations and achieve measurable results. There are targets provided by producers and characters that have been prepared in achieving these targets. There is no player participation in the form of the game or character, and the player tries to reach the levels provided by the manufacturer. But then, based on its natural history, the emergence of the game triggered a feeling of competition among game players and the community of game players emerged and competed to put themselves in arcade records. This feeling of competitiveness then begins to involve the "soul" of the players to be more involved in the game they are going through.

An important discussion about the body centers on the online game, where players are then involved in determining the shape and character of the player. In fact, the players not only form the appropriate identity provided by the game producers, but also create an identity that suits their desires. The informants revealed that they were involved in the game and had to work together and communicate continuously so that they could meet the target together and win the game. Because of its real time nature, informants have high involvement in terms of time and commitment to keep contributing in groups. In previous studies, it was identified that MMORPG players had cosmopolitan cultural principles that emerged with their involvement in the game, namely Competitive Fighting Spirit, Conquest Challenge, Global Organizational Participation, Excitement Popularity Pleasure Satisfaction and Global Homogeneity. This also

appears as a form of involvement of informants of this research in the online games they follow.

In this involvement, the digital body of the players in the form of Avatar is a part of the real body created as a representation in the digital world. An informant said, he has no choice when choosing an avatar and completing the avatar with attributes according to him because the avatar is provided (template), meaning that he can only choose from the options provided and complete the avatar attribute according to the choices provided. It's just that in his journey, how he plays role playing and chat with fellow players, he communicates through the avatar and acts as he wishes to become the identity of the avatar. When he formed the identity, the identity of the avatar was nothing but a part of him. Although the physical appearance does not resemble the physical in the real world, the avatar character is more or less formed based on his daily character, especially when members of the play group are also friends in the real world. The informant said, his body tend to be fat and considered as obese, but he's chosen Avatar provided which had different shape from his, but the character of the Avatar is formed based on his real life character. He considered himself as a lazy person, and he said his Avatar was known as a lazy character in the game.

In this context, the avatar becomes a digital body that is transformed as the Second Self. According to Weger, Second Self is referring to your online identity, to your virtual life lived in parallel to the real world. That is why this simulated body becomes an extended self because the player feels his simulated identity (Avatar) with himself as the creator of the digital body itself. In this context of research, I found online-gaming avatar have characteristics: *Controlled-Dematerialized Self*, *Re-embodiment Self*, *Social-Supportive Self*, *In-Group Oriented Self*. and *Cosmopolitan-self*.

Table 1. Characteristics of Online Gaming Avatar

Characteristics of Online Gaming Avatar	
<i>Controlled-Dematerialized Self</i>	In the context of online games, Avatar is a form of Controlled-Dematerialized Self where online gamers have a strong attachment to an avatar, but the existence of an Avatar depends on the form provided by the game manufacturer
<i>Re-embodiment Self</i>	Online gamers can choose an Avatar to represent themselves, the body shape can be changed and reconstructed like replacing engine parts. Furthermore, the digital era gives more space to the process of changing body not by replacing parts, but creating "new bodies". Re-embodiment is not only a matter of creating a new body, but also a simulation of the body. That is, when the physical body changes into a different format, the digital body becomes a simulation for the physical body
<i>Social-Supportive Self</i>	The digital body allows online gamers to do more extensive sharing activities online. Online gamers have complete freedom to interact with anyone in the virtual world and the sense of togetherness that emerges as a result of social interactions between member groups in the game community, binding not only digitally, but also socially in order to reach the position of the winning team
<i>In-Group Oriented Self</i>	Online gamers tend to develop their trustworthiness and cooperative abilities and develop cohesiveness with their group
<i>Cosmopolitan-self</i>	Maintain cosmopolitan principles; Competitive Fighting Spirit, Conquest Challenge, Global Organizational Participation, Excitement Popularity Pleasure Satisfaction and Global Homogeneity

Source: Reseachers' work

What is hyperdigitalization of body? Some cases show that the digital body is extended-self (see Maddalena & Packer, 2014) , but some others show the phenomenon that there is no

connection between the digital body and the physical body. In the case of Mat Steen, the gaming community knew him as his Avatar, namely Lord Ibelin. Lord Ibelin is Mat Steen's Avatar. It is a form of himself that is simulated into virtual body. When Mats died at the age of 25, his parents were astonished by the many mourners who came and offered condolences. Not only that, those who come not only from their country, Norway, but also from other countries. Apparently, for the last dozen years of his life, without his family knowing, Mats Steen is a famous online gamer. He is known as Lord Ibelin Redmoore (and sometimes Jerome Walker) from Planet Azeroth in the famous online game World of Warcraft. Lord Ibelin was an identity separated from Mat Steen because then Lord Ibelin became a complete identity living in a virtual world. It means Lord Ibelin as a simulation body of Mat Steen became his extended self and his online identity. Meanwhile, another case is Marcus Dickinson who lived as his avatar, Roc Wieler in the digital world (blogs and games). Even, Dickinson later adjusted himself to be in line with the Roc identity. For Dickinson, Roc Wieler is a brand. He has a blog called Roc's Ramblings that he writes for daily as Roc. This means that at a certain stage, the body has moved from the physical body into the virtual body that is separated and totally different from the physical body. Dickinson felt Roc is more him than him in the real world, so he adjusted himself to be more like Roc physically. So he formed his physical form more like Roc and Roc had his character as an Avatar. This writing manages to discuss the phenomenon based on Baudrillard's hyperreality. To reach hyperreality stage, an image will go through 4 phases. *First*, it is the reflection of a basic reality. *Second*, it masks and converts a basic reality. *Third*, it is the problem of basic reality, and *fourth*, whatever it is, whatever its reality: it is its own pure simulacrum.

In relation to the body, it can be seen that *the real body is the physical body of the online gamer itself*. The body which is the visible reality. He is the physical body and soul of Mats Steen and Marcus Dickinson. Mat Steen who had DMD disease and disable and Dickinson who is a bacon lover Canadian. *They are Physical bodies*. In the second phase, this physical body is extended by a dematerialized process and places the soul in a digital form, namely Simulation Body. In the third phase, this creation of digital body is through the process of selecting the desired avatar, which can be far from the initial physical body shape. Not even a small part of the initial body appears in this digital body, only the self is extended to a different body formation from the real body. The DMD and disable body of Mat Steen was being dematerialized into Lord Ibelin and Steen put his soul in the character of Lord Ibelin. Dickinson also created Roc Wieler his "EVE" Avatar who was a retired colonel from a tribe, a stoic, physically imposing disciplinarian. *In this phase, the body is a Digital Body*. In the last phase, the body's simulacrum, where the body of this formation is far from the real physical body and *becomes a Virtual body with a complete identity and becomes its own real body in the virtual world*, as Lord Ibelin for Steen and Roc Wieler for Dickinson. Quoting Baudrillard, hyperreality is more real than real, so this virtual body has a new identity that even the owner of the body (online gamers) recognized it as a better and more real self than his own physical body. This phenomenon is named Hyperdigitalization of Body, which can be interpreted as a process of the body being hyperreal, through phases.

Physical body → Simulation Body → Digital Body → Virtual Body

Fig. 1. Hyperdigitalization of Body

4 Conclusion

Based on the basis of the Baudrillard's hyperreality, the conclusion is the online gamer body has undergone a physical body process into a virtual body in phases: (1). Physical body, (2). Simulation Body; (3). Digital Body, and (4). Virtual Body. This process is namely hyperdigitalization of body, which can be interpreted as a process of the body being hyper, from physical body to virtual body. This research also define the characteristics of online game avatar as: *Controlled-Dematerialized Self*, *Re-embodiment Self*, *Social-Supportive Self*, *In-Group Oriented Self*, and *Cosmopolitan-self*.

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