Artificial Intelligence In Mass Media: Virtual Influencers And Their Role In Human Entertainment

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Abstract

This past decade has proved to be a historical time in the development of technology for both practical and entertainment purposes. However, with the rise of social media and the immortality of the world wide web, the price of the entertainment industry may be doing more harm than good in terms of mental wellbeing. Through observing the curation of virtual influencers and robotic supermodels, we begin to see the prominence of machines in such a field, and—through the process—determine the psychological bonds we create with those we see on our screens, whether human or robotic.

Keywords: Artificial intelligence, entertainment, microcelebrity, parasocial

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Machines have a long standing image of existing for the sake of humans' protection and wellbeing. Though always prioritizing physical safety, they may also serve as a beneficial tool in the betterment of individuals' mental health. Specifically in the entertainment sector, numerous performers and consumers of digital media suffer from cases of mental illness, a result of constant comparison and competition in the industry. With this being said, I will be researching the various methods in which machines and artificial intelligence can provide safety towards humans in the sense of the public eye, as well as the arguments of parasocial interaction with these virtual machines.

This paper is divided into four sections. The first section will delve into the current models of Artificial Intelligence and robotics in the entertainment industry. The second and third sections will cite its benefits and drawbacks, specifically the ability to bring safety to those in the limelight and the dangers of exploitation. The fourth section will determine if humans are able to accept such drastic changes in the entertainment industry, and the psychological reasons and biases preventing us from doing so.

I. Existence of AI Technologies At Present

Over the years, there has been a rise in AI and machinery in celebrities and influencers, intersecting the industries of technology and mass media. As an example, Korea is one of the leading countries in the industry of music, due to the Hallyu culture wave of 2007. They are responsible for the music genre K-Pop, where groups under entertainment companies interact with fans through performances. Entertainment company Pulse9 debuted K-Pop girl group Eternity: shown in Figure 1, Eternity is an experiment that consists of all Artificial Intelligence (AI) members. Using a technology called "Deep Real AI" and having their voices manipulated by machines, this has been the first group that utilized humanlike complexions in the virtual creation of their members (Yoon, 2020).

Figure 1

Korea's First All-AI Girl Group "Eternity"



Beyond the world of music, the modeling industry has also dipped their toes into robotics in their sector of entertainment. In 2009, Japan developed a humanoid robot called HRP-4C, who made her debut by walking at that year's <u>Tokyo Fashion Week</u>. HRP-4C, nicknamed Miim, was designed to resemble an average Japanese female—albeit with a futuristic, metal body as shown in Figure 2. To obtain graceful motion of women, the researchers at the National Institute of Advanced Industrial Science and Technology requested a professional walking model to perform various motions, which were then captured by a 3D motion capture device called Vicon Motion Systems (Kajita et. al, 2009).

Figure 2

Cybernetic Model HRP-4C





In addition, other occupations in mass media such as livestreamers and social media influencers have been introduced to AI counterparts. On the streaming application Twitch, there is a genre catered towards virtual streamers nicknamed VTubers, which involves creating a 3-D rendition of a human. A popular VTuber is named CodeMiko, who was created using a software called Unreal Engine Software. The streamer, despite the lack of a human exterior, gained over 650,000 followers on the platform. Along with this, controversy has risen with the introduction of CGI influencers. The most popular character in this field is named Lil' Miquela, a celebrity that has amassed more than 3 million followers on Instagram. Seen in Figure 3, she is created using Adobe Fuse and Cinema 4D (Drenten, 2020). All these examples show how technology is slowly but surely transforming media as we know it.

Figure 3

Instagram's Virtual Influencer Lil' Miquela



II. Benefits: Towards A Safer Future of Entertainment

Curating virtual identities that exist primarily in the entertainment sector provides numerous advantages to humans. Author Mark R. W. Williams discusses the mental and physical health and welfare of those in the media. In his book *Falling Through the Gaps*, those who work in the entertainment industry—such as actors and musicians—create experiences for others to enjoy; yet, their own work can have a negative impact on their own wellbeing, such as through strenuous work and irregular and low-paid salaries (Williams, 2020).

"Performing artists who have made substantial contributions to our culture and society will end up poorer, have worse mental and physical health, and a shorter life span" Williams writes. Machines are known for not experiencing fatigue and stress from their employers. Through adding them into entertainment—as they do not need to sleep, eat, and depend on a living wage—they will be able to provide the nonstop entertainment us humans crave on a daily basis. In addition, the ability to code certain emotions will prevent them from developing forms of jealousy and competition.

In addition to the negative effects of media on the performers, the media also has a strong impact on the users. Modern influencers constantly edit themselves to replicate the glamour of a traditional celebrity. Individuals end up making comparisons with them due to their distorted perspective of social media (Jan et. al., 2017). With this said, there are also benefits this proposal could bring to consumers of digital media. Through the awareness that these influencers are merely robotic and possess no control over their physical features, this will allow humans to stop comparing themselves to those who edit themselves into unrealistic standards.

Though there is the fear of humans comparing themselves to machines, we humans would be merely engaging in a *kayfabe*. This concept depicts an artificial display meant for entertainment purposes. Applying this concept onto robotics and AI in entertainment, this would present staged performances as genuine or authentic (Drenten, 2020). Through this, we suspend our belief and act as if they were real when we know they are fake.

Creating AI and cybernetic influencers and performers for these purposes are in line with Asimov's three Laws of Robotics (Asimov, 1963). Detailing how a machine may not injure a human being or, through inaction, allow a human being to come to harm, saving humans from potential stress and preventing them from unhealthy comparison helps machines fulfill this first duty. Though meant to be created for the sake of promoting products and clothing, the main purpose of this sub genre of entertainment is to protect humans, not only in the physical but also their mental safety.

III. Drawbacks: The Question of Accountability

Though presenting apparent benefits to humans if introduced to the entertainment sector, these programs and machines are also capable of harming one's wellbeing. Because they have yet to possess a mind of their own to refuse certain tasks, they can still be coded to do harm rather than good. Such instances have already happened over the last decade with the rise of "deepfakes". A deepfake is a practice of AI wherein one's face (usually a celebrity) is put on the body of another human, as shown in Figure 4. This has been used mostly for sexual and

pornographic purposes, which proves to be a disgusting cost of fame. This may cause scars of trauma amongst those whose face was used without their consent.

Figure 4

A Side-By-Side Comparison Of Deepfake Technology



Deepfake images have immortality: due to the neverending depths of the internet, if even one video or photo comes out, it would take months or even years to delete all known sources of the file. Comparable research on the non consensual distribution of intimate images (also known as "revenge porn") shows victimization is associated with depression and anxiety disorder (Maddocks, 2020). Deepfakes have become even more accessible and affordable, with codes being shared on public websites such as GitHub and apps like FakeApp requiring little coding experience to use. However, who is to blame—the machines themselves, or the coders for making them this way?

Another factor that should be considered is ethics: though characters made by machinery will be able to do so much more compared to humans—who are restricted by time, money and others—the issue of responsibility also comes into question (Müller, 2020). Debates arise regarding their accountability for human errors. Because these forms of machines are purely

fictional, we cannot hold them liable for immoral or illegal actions. This grey area of blame, then, may allow big conglomerates to abuse this power by hiding behind the virtual character to maximize profit (Drenten, 2020).

Due to brand partners being able to profit off of these immortal influencers and their "inability" to do wrong, their persona reads highly of a form of property rather than a human—to be bought, sold, and manipulated. Such manipulation is common in multiple gambling and gaming industries. In a study recording the responses of humans to virtual influencers, respondents expressed uncertainty regarding whether it is more than one person behind their opinions. They felt uneasy not being able to see the team behind the character, and would therefore not trust them as much as a human influencer: "I guess I trust them less when there is a big company behind and not a private person," a respondent explains (Molin & Nordgren, 2019).

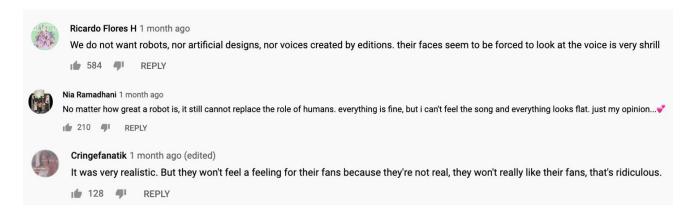
IV. Are We Ready? Our Bias For Humanlike Behaviors

Through enumerating the various benefits and drawbacks of having machines in mass media, we aim to see if we as a human population are ready for such a new introduction. Through interviews and observations from respondents regarding such influencers, we see that, though we have come a far way with its development, there is still one hurdle we simply are unable to overcome: our human bias.

Most of the AI and cybernetic performers and influencers are currently one-dimensional, and possess little to no form of self-thinking. Because the machines were made for the purpose of entertainment, their aesthetics were prioritized before emotion. Because of our bias towards human-like behaviors, these were met with backlash. In Figure 5, we see the comment section of AI girl group Eternity's music video, negative comments fill the page with how they look "soulless" and unable to replicate emotions towards their fans, even if they possess the most human-like features out of the current AI avatars in K-Pop. Why do we humans care so much about these behaviors, especially for an industry meant purely for entertainment and not for interaction?

Figure 5

Negative Comments For AI Girl Group "Eternity"



Most of the emotions we feel with current celebrities are merely the result of unrequited emotion to the characters they play. A parasocial relationship—widely known in the entertainment industry—is a one-sided relationship where one person extends emotional energy and the other is unaware of the other's existence. This machine influencer system questions the significance of authenticity in celebrity practice—these virtual stars should not be any different from how we treat human influencers at present.

With this said, it is important for us humans to not only adapt to the new forms of intelligence before they can begin fully taking over the entertainment industry, but also reflect on our relationship with entertainment as a whole. Humankind is going through a dynamic change in lifestyle due to the technological revolution: with such forms of artificial intelligence, we open up the doors to a new future in entertainment (Yoon, 2020). This train towards artificial intelligence will not stop, so it is up to us humans to decide how we should properly welcome it into our lives.

With a multitude of current creations, research for AI in creative industries is a timely and promising endeavour. If we are able to move past the aforementioned biases and mindsets we humans currently have, further innovation can be attained in this field (Amato, 2019). Creativity in the use of AI for media should thus also be encouraged, and we should not let our view of the present deter us from the possibilities of the future—a world of safer and more creative forms of entertainment

References

- Amato, G., Behrmann, M., & Bimbot, F. (2019, May). *AI in the media and creative industries*. ResearchGate. http://www.researchgate.net/publication/333041972_AI_in_the_media_and_creative_industries.
- Asimov, I. (1963). I, Robot.
- Braun, M. (2019, July 1). *Scientists identify the possible source of the 'Uncanny Valley' in the brain*. University of Cambridge. http://www.cam.ac.uk/research/news/scientists-identify-possible-source-of-the-uncanny-val ley-in-the-brain.
- Drenten, J. (2020, October 4). *Celebrity 2.0: Lil Miquela and the rise of a virtual star system*. Taylor & Samp; Francis. https://www.tandfonline.com/doi/full/10.1080/14680777.2020.1830927.
- Jan, M., Soomro, S. A., & Ahmad, N. (2017). *Impact of Social Media on Self-Esteem*. European Scientific Journal, ESJ, *13*(23), 329. https://doi.org/10.19044/esj.2017.v13n23p329
- Liew, K. (2021, January 12). *Future of entertainment? Avatars could be K-pop's next superstars*. CNBC. http://www.cnbc.com/2021/01/11/future-of-entertainment-avatars-could-be-k-pops-next-superstars.html.
- Maddocks, S. (n.d.). 'A Deepfake Porn Plot Intended to Silence Me': exploring continuities between pornographic and 'political' deep fakes. Taylor & Francis. http://www.tandfonline.com/doi/abs/10.1080/23268743.2020.1757499.
- Molin, V., & Nordgren, S. (2019, July 3). Robot or Human? The Marketing Phenomenon of Virtual Influencers: A Case Study About Virtual Influencers' Parasocial Interaction on Instagram. DIVA. http://uu.diva-portal.org/smash/record.jsf?pid=diva2%3A1334486&dswid=-2023.
- Williams, W. M. R. (2018). Falling through the gaps: our artists' health and welfare. Currency House.
- Yoon, S. (2020, November 10). *Will avatars be K-pop's newest superstars?* Korea joongAng Daily. https://koreajoongangdaily.joins.com/2020/11/10/entertainment/kpop/aespa-avatar-KDA/2 0201110180200510.html.