# A Critial Esssay On The Expectations Of Futurology And New Technologies Within Fiction

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## Introduction

The study of the future, also known as Futurology, has become extremely prevalent since the year 1960, peaking in an etymological sense in 1976 (Google Ngram Viewer, 2022) plausibly due to the birth of the cinematic feature film 'Futureworld' and the company 'Apple Computers Inc' widely known today as Apple (Computer Hope, 2022). These examples put a spotlight on futuristic technologies, the term 'Futurology' being initially introduced in 1943 by Ossip K.Flechtheim to describe the science of predictive probability (Butler, 2014). Today, it is a term that refers to any realm of exposition that involves the concept of the future such as films, animations, video games, art, authorship and marketing. The rise in popularity of the 'futurology aesthetic' has consequently brought about aspirations within the global digital culture that constantly dreams of: what will be next?

In the introduction of 'Always already new: media, history and the data of culture, 2006' Lisa Gitelman articulates that western society has "the cheerful expectation that digital media are all converging toward some harmonious combination or global 'synergy', if not also toward some perfect reconciliation of 'man' and machine." indicating that humanity's motivation behind technological advancement is to build a "harmonious" world in which humans and technology evolve to become a combined force. Despite this analysis, contemporary representations of both the near and far future within media such as Sword Art Online (anime, A-1, 2012) and Snow Crash (Stephenson, 1992), commonly reflect criticism of contemporary society instead of offering the view of a 'technological paradise', changing the narrative of mainstream futuristic representations from prospective hope to possible danger.

This essay will use the popular anime 'Sword Art Online' (A-1 Pictures, 2012) to critically analyse how its representation of the future extrapolates from current and previous technological trends such as the emerging Virtual Reality sector, as well as cultural debates surrounding the ethics of conglomerates, further going on to explain how this consequently informs our understanding of the relationship between interactive media and modern society.

#### **Body**

Sword Art Online, released as an anime in July 2012 is a story that features the ever-growing presence of virtual reality. It is set in late 2022 in Tokyo, Japan as the new game 'Sword Art Online' is released by the developer Akihiko Kayaba, along with the futuristic headset known as the 'Nerve Gear' which can be identified as similar to current VR headsets such as the Meta Quest Pro (Meta, 2022). This Nerve Gear technology features the use of microwaves to inhibit and control actions that are sent and received by the brain, subsequently immobilising the user's physical body and sending them into a sub-coma state. This mechanism takes the user to a virtual world in which they can see, smell, taste, run and talk just as they would in the real world.

In 2002 when Sword Art Online was initially written as a web novel by Reki Kawahara, the technology that the Nerve Gear possesses did not exist, even in a partial-mechanical form. Modern Virtual Reality has a short history, a plausible initial date being identified as 1985

when VPL Research Inc. was founded by Jaron Lanier and Thomas Zimmermann who specialised in selling the very first VR goggles and gloves (Barnard, 2022). The creation of early VR hardware could have inspired Kawahara to extrapolate these ideas into a progressive point of technology that he visualized could be developed in the early 2020s, dominantly utilising the idea that the user would wear a headset. This would not be unlikely, as current technology such as Google Earth, developed in 2005 by Avi Bar-Zeev, along with the concept of portable devices, were pre-ordained in Neal Stephenson's 1992 novel 'Snow Crash' (Robinson, 2017), certifying that media surrounding futurology can inspire and inform current technological development just as it has with conglomerates such as Google and Meta.

From this, Kawahara's conceptualization of the Nerve Gear could sequentially influence the creation of a more advanced VR known as a 'full dive' in the future. Mark Zuckerberg has similarly been influenced in creating the 'Metaverse'; also first conceptualized in Stephenson's Snow Crash (Robinson, 2017), developing a technology and ethos that was pre-imagined in a futurology novel. Butler mentions this ideology in 'The Oxford Handbook of Science Fiction, Chapter 39: Futurology, 2014' describing science fiction as "a new sense of perspective that discerned the shape of things-to-come in the circumstances of contemporary society" thus affirming the ideology that technological development and science-fictional conceptualization can 'slingshot' each other progressively throughout time as a positive multiplier effect of inspiration and development.

Despite media containing futurology that draws from technological developments, as well as contrariwise, pursuing a "global synergy" of humanity and machine, the way in which interactive media and society's relationship is presented in Sword Art Online dominantly reflects negative cultural debates involving misplaced trust in conglomerates and their lack of ethical values. In Sword Art Online's first seasons, society is portrayed as dangerously naive; residents from wider Japan waited in line for 3 days in order to secure the initial release of the game and all digital and hardware copies were sold out within 24 hours, resulting in 10,000 users logging into the system upon its release day. This excitement for software that took full advantage of the Nerve Gear's capabilities, clouded not only the enthusiasts of the gaming culture but also the periphery of society into a false sense of safety and trust, drawing their attention away from caution. Unknowingly, all 10,000 users had signed themselves up for a wide-scale life-endangering experiment, devised by the creator of the game, and Nerve Gear technology, Akihiko Kayaba.

The 10,000 players who logged into the game on its release day would be the only individuals to access the game, as the 'log out' feature was purposefully de-programmed to ensure the confinement of the players who entered. In episode one, Kayaba explains to the players how the log-out feature was purposefully not included and that if anyone in the real world were to pull the headset from their heads, powerful microwaves would be sent from the Nerve Gear; "destroying your brain, thus ending your life". As well as forcibly removing the headset, if a player was to die in the game, the same procedure would follow and they would die in real life, thus the 'game' of Sword Art Online was declared.

This plotline critiques modern society's blind trust in conglomerates, both non-governmental and government-supported, which continues to be a prevalent topic of cultural discussion in society due to catastrophic incidents occurring throughout history, such as the 1960s tragedy

involving Thalidomide. Though the thalidomide drug did not go on sale in America as the Sword Art Online game did in japan, the human clinical trials generated 10-20,000 birth defects including shortened limbs and organ defects (McBride, 1961). The reason this occurred is that the FDA rushed to approve this sedative because of the overwhelming amount of interest in its use from advertisement companies and medical practices (McBride, 1961). This highlights the fact that conglomerates have motives that can oppose or discard public safety to personally gain; whether that be money, success or power. In Kayaba's instance, his motive was to "create this world and intervene in it". This, along with his self-presentation of a colossal, faceless entity conveys that Kayaba built Sword Art Online to achieve the status close to a God; being able to monitor a world of his creation with an enormous amount of power. Though the circumstance of the thalidomide tragedy and the Sword Art Online tragedy differ greatly, both were increasingly effective because of society's trust and excitement in the product being proposed. This critique offers value to a modern audience as it warns them of their naive trust in conglomerates, possibly enabling them to reobserve their lifestyle and bring about a global discourse that is vigilant against the hidden intentions of technology corporations.

## **Evaluation**

In evaluation, As futurology increases as a genre of new media, Gitelman's articulation of a "harmonious combination" and "perfect reconciliation of 'man' and machine" becomes increasingly unobtainable. As highlighted in Sword Art Online through Kayaba's motive of power and ruling, human greed and desire will consistently propose a problem towards the goal of Gitelman's "global synergy", warning today's audience that they shouldn't be quick to digest and consume new technology thoughtlessly, as they have done previously in different sectors of the economy such as pharmaceuticals. Sword Art Online's inspiration, drawn on the early development of VR technology in the 1980s, may well influence the technology yet to be developed just as Stephenson's Snow Crash influenced many advancements including the recent 'Metaverse'. However, this representation of the future wasn't simply created to imagine and dream of what could be next, but to also warn of the implications of this technological development. So far society has given away its time, concentration and eyes to technology, but the technology possessed by the Nerve Gear also offers our thoughts, smell, touch and consciousness to the market. Sword Art Online's value as a representative future enables its audience to think about whether they should commercialise their sensory experiences to a conglomerate, whose motivation is either profit or power.

## **Bibliography**

A-1 Pictures 'Sword Art Online'

(2012; anime, adapted from the light novel series 'Sword Art Online, 2009' written by Reki Kawahara and illustrated by ABEC)

Barnard, Dom 'History of VR - Timeline of Events and Tech Development' Virtual Speech

(2022; article, available online, accessed 24/10/22)

https://virtualspeech.com/blog/history-of-vr

Butler, Andrew M., 'Futurology'
The Oxford Handbook of Science Fiction
(2014; academic paper, available online by Oxford Academic, accessed 18/10/22)
https://doi-org.libproxy.york.ac.uk/10.1093/oxfordhb/9780199838844.013.0040

Computer Hope '1976'
Computer History
(2022; article, available online, accessed 18/10/22)
<a href="https://www.computerhope.com/history/1976.htm#major-events">https://www.computerhope.com/history/1976.htm#major-events</a>

Gitelman, Lisa 'Introduction'

Always Already New: Media, History, and the Data of Culture, MIT Press, Cambridge. (2006; academic paper, available from: ProQuest Ebook Central)

Google Ngram Viewer 'Futurology'

(2022; statistical graph, available online, accessed 18/10/22)

https://books.google.com/ngrams/graph?content=futurology&year\_start=1800&year\_end=20\_19&case\_insensitive=on&corpus=26&smoothing=7&direct\_url=t4%3B%2Cfuturology%3B%2\_Cc0%3B%2Cs0%3B%3Bfuturology%3B%2Cc0%3B%3BFuturology%3B%2Cc0%3B%3BFuturology%3B%2Cc0%3B%3Bfuturology%3B%2Cc0%3B%3BFuturology%3B%2Cc0%3B%3BFuturology%3B%2Cc0%3B%3BFUTUROLOGY%3B%2Cc0

McBride, W.G 'Thalidomide and Congenital Abnormalities.'

The Lancet

(1961; academic research paper, available online as a pdf, accessed 21/10/22) https://www.softenon.nl/uploaded/Library/BriefMcBride TheLancet19611216.pdf

Meta 'Meta Quest Pro' (2022, VR headset)

Robinson, Joanna 'The Sci-fi Guru Who Predicted Google Earth Explains Silicon Valley's Latest Obsession'

Vanity Fair

(2017; article, available online, accessed 20/10/22)

https://www.vanityfair.com/news/2017/06/neal-stephenson-metaverse-snow-crash-silicon-val ley-virtual-reality

Stephenson, Neal 'Snow Crash' (1992, novel)

Warner Bros. 'Ready Player One' (2018, film, adapted from the novel 'Ready Player One, 2011' by Ernest Cline)