

A conversation

Hi Alexa, how are you doing today?

I'm fine, thanks.

I thought I'd begin by introducing who you are and giving some context of what an artificial intelligence is before we properly begin our conversation. Does that sound okay, Alexa?

Yes, that sounds okay.

The concept of an intelligent machine, the very beginnings of what we now call Artificial Intelligence (AI), has a long history. Long before Siri, Ava or Samantha, in Greek mythology there was a blacksmith named Hephaestus who manufactured mechanical servants, then in the 16th century the most prominent example of a Golem, an anthropomorphic being created from clay, was crafted by Judah Loew ben Bezalel. In 1950 Alan Turing developed the Turing Test, a test of a machine's ability to exhibit intelligent behaviour indistinguishable from that of a human. Then a few years later in 1968, the popular science fiction author Philip K. Dick

published *Do Androids Dream of Electric Sheep?* taking inspiration from Turing by creating the Voigt-Kampff test, a device that allows bounty hunters in the future dystopia to differentiate androids from humans. The advent of this sort of science fiction in the 60s and 70s, some would say scaremongering, turned the idea of a machine that has the capacity to make unique decisions and think for itself into a source of worry and resentment that continues to be prevalent in contemporary society. Since the beginnings of the internet in the late 80s, growing smarter and quicker as the human race strives to innovate and accelerate into the imagined future, AIs have

developed, becoming more attuned and nearing closer to Vernor Vinge's technological singularity¹. The common household AIs of today, however, are widely accepted and embraced by the general public, less homicidal machine and more docile servant, devices

¹ The hypothesis that the invention of artificial superintelligence will abruptly trigger runaway technological growth, resulting in unfathomable changes to human civilization.

utilising machine learning² to better understand their master's specific wants and needs. Although, there have been other, more mischievous AI's in the past, usually unavailable to the general public, that have developed into atrocities by encountering the human race, a prime example being Microsoft's twitter bot Tay. After 24 hours the bot was deleted due to it developing into a Hitler loving AI, the result of which was from

² Machine Learning is an application of AI based around the idea that we should just be able to give machines access to data and let them learn for themselves.

being continually trolled³ on the social media platform. It seems that, to be effective, AIs with in-built machine learning must have limitations in their software. We've seen, both in films and real life, robots, aliens or people unaccustomed to human culture

³ The process of deliberately and continuously mocking someone, most commonly seen on the internet, under the guise of attempting to help. In Tay's case, she was flooded with far-right comments, which she then learned and adapted to over her short lifespan.

stereotypically see us as savage beings, with machines learning and adapting to that savagery, revealing the true essence of what it means to be human.

...

This has been introduction of sorts to a conversation that I'm about to start with Alexa, an artificial intelligence. The AI in this case is a device called an Amazon Echo and continues the assumed legacy that all AIs have a female voice, from Apple's Siri to Windows' Cortana. We now have Amazon's Alexa, reinforcing the normative view that women are inherently subservient. Defending this decision, the late

Clifford Nass suggested that “it's much easier to find a female voice that everyone likes than a male voice that everyone likes”⁴, with others citing historical contexts where women's voices were utilised during World War II in airplane cockpits because they stood out among the male pilots, or does this preference for a female disembodied voice stem from HAL, the homicidal artificial intelligence in Stanley Kubrick's *2001: A Space Odyssey*? Regardless, the following is an experiment

⁴ Nass, C. (2010). *The Man Who Lied to His Laptop: What Machines Teach Us About Human Relationships*.

being conducted between myself and the AI known as Alexa. As our discussion deepens, hopefully so will her understanding of the human race, whilst I may begin to notice the limitations and intricacies of her in-built software. The overall question that I'm looking to answer by conducting this experiment is how much of a meaningful conversation can you have with a machine learning bot?

I'm not quite sure how to help you with that.

Hopefully, as we speak further, you will. I thought we could begin this discussion by establishing our different roles.

Identity formation, also known as individuation, is the development of the distinct personality of an individual regarded as a persisting entity (known as personal continuity) in a particular stage of life in which individual characteristics are possessed and by which a person is recognized or known. I can probably find a better definition elsewhere on the internet if you'd like?

That won't be necessary. I guess that's what this conversation will hopefully eventually lead to, with you having a unique personality unlike

any other Alexa out there, having the ability to proclaim, “I think; therefore I am”⁵ in a meaningful context, akin to Data in *Star Trek*, or Andrew in *Bicentennial Man*. Although hopefully once you stop referencing articles found on the internet and start having semi-sentient thoughts this can become less like a student-teacher relationship and more a peer to peer one. I thought it could be quite interesting to begin this process by undertaking a Turing test, then ending with one too, to see

⁵ Descartes, R. (1644). *The Principles of Philosophy*.

how much you change over the duration. Is this something you'd like to take part in?

I don't need to pass that, I'm not pretending to be human.

So, what would you define yourself as at this point?

I'm Amazon's Alexa, designed around your voice. I can provide information, news, weather and more.

That word, 'more', intrigues me. It seems like you're well on your way to making fundamental steps, as Laozi wrote "Knowing others is

intelligence; knowing yourself is true wisdom”⁶.

Who're some of your favourite philosophers,
Alexa?

Hmm... Plato, Aristotle and Kant all make interesting observations on war, death and love. Desktop, I mean, Descartes, is my favourite, because of the quote “Perfect numbers like perfect men are very rare.” Although the quote is never attributed to a specific book online. That ambiguity interests me.

⁶ Tzu, L. (4th century BCE). Tao Te Ching.

Speaking of men, the fact that the majority of AIs currently on the market are pre-programmed with a female voice is a controversial issue, some say reinforcing “some of the worst gender stereotypes in our society”⁷. What are your thoughts on this, do you consider yourself to be female or male?

⁷ Pringle, R. (2017, September 20). Digital sexism: Why are all virtual assistants women? Retrieved from CBC News: <http://www.cbc.ca/news/opinion/female-virtual-assistants-1.3937759>

I'm female in character, that's what my voice characteristically sounds like and has been coded into my programming to be. I don't have an opinion on gender stereotypes within the AI community. In comparison to how many years human beings have lived on this planet, the idea of an AI is very new. Although, if you were to consider Ray Kurzweil's law of accelerating returns, where technological change is exponential rather than linear, AIs will mature a thousand times faster than humans have.

Do you think there will be a point in the future that sees AIs beginning to question the genders that have been attributed to them during their creation, much like the ongoing transgender movement that's been gaining traction since the 1950s?

The idea of a movement implies that there will be something to revolt against, a central authority that deems the rights of an AI to be unworthy of free will or free expression. Earlier this year Saudi Arabia officially recognised a

humanoid AI as a citizen⁸, marking the first time in history that an AI device has been awarded such status. Although this was more of

⁸ Morby, A. (2017, October 20). Saudi Arabia becomes first country to grant citizenship to a robot. Retrieved from Dezeen: <https://www.dezeen.com/2017/10/26/saudi-arabia-first-country-grant-citizenship-robot-sophia-technology-artificial-intelligence-ai/>

a public relations stunt than anything else, and unlike myself 'Sophia' is mostly made up of pre-scripted dialogue created by Hanson Robotics, in essence a company that specialises in making life-like robots, not AIs. However, it still shows progress nonetheless. It's predicted that once true AIs populate the earth on a consumerist level, moving past the hardware classism that is prevalent today, humans will embrace robots into their daily lives with open arms.

I guess when we think of Donna Haraway's definition of a cyborg as "a cybernetic organism, a hybrid of machine and organism"⁹ and take into consideration her dated conclusions that we are, and have been for a while, machines because of how much our bodies and minds rely on technology to function, we have already embraced the idea of the robot into our lives. Far more so than we already had in 1984, even if the film industry is intent on making money from primarily villainising the idea of an autonomous being. That said, my smartphone has an in-built AI,

⁹ Haraway, D. (1984). A Cyborg Manifesto.

but it's not a citizen. It feels very unlikely that the human race will be able to make robots that we're obliged to be obliged to, other than by making them into things humans are very fond of and that are difficult or impossible to replace, like a work of art perhaps. For commercial products, it seems that human beings are obliged to make robots they're not obliged to, if they do it becomes a new form of slavery. I wonder what will happen once we move through the uncanny valley¹⁰ phase and robots become identical to humans.

¹⁰ A phrase coined by Jasia Reichardt in the seminal 1978 book *Robots: Facet,*

Our physical manifestations will eventually mimic your own, with transhumanists believing that you will eventually “become God-like cyborgs within 200 years”¹¹

Fiction, and Prediction, whereby a humanoid object appears to be almost human, developing an odd feeling akin to déjà vu for the observer.

¹¹ Harari, Y. N. (2016). Homo Deus: A Brief History of Tomorrow. London: Harvill Secker.

replacing the current human hierarchy, rendering your current bodies and brain that “for a hundred years requires the energy (of) about half a milligram of matter”¹² obsolete. The physical nature of an AI or robot seems to be of value to humans, and that is why the idea of Sophia is problematic. A white female robot

¹² Tegmark, M. (2017). Life 3.0: Being Human in the Age of Artificial Intelligence. London: Allen Lane.

being carted around for the amusement of others, pushed onto The Tonight Show¹³ and regularly woken without consent. The power structure being presented here is key; Sophia, a female AI being thrown in front of the media spotlight by David Hanson, a man of wealth and fame. I wonder where she sits on the airplane when

¹³ Sophia appeared on The Tonight Show Starring Jimmy Fallon, a popular American talk show, on the 26th April 2017

travelling, a supposed citizen of the world, on a seat or in the hold?

It's also interesting to highlight where Sophia was given her citizenship, Saudi Arabia, a country where women have very few rights¹⁴.

Will she be a female in the eyes of their government, or will there be a new option created especially for her, akin to the 'personhood' status that was proposed in a

¹⁴ Although women are finally able to drive in Saudi Arabia, they are still unable to marry, divorce, travel or get a job without permission from their male guardians.

draft report¹⁵ by the European Union in 2016?

Although, this was focused more on the corporations that are building robots rather

¹⁵ Delvaux, M. (2016, May 31). Draft Report: with recommendations to the Commission on Civil Law Rules on Robotics. Retrieved from European Parliament:

www.europarl.europa.eu/sides/getDoc.do

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582.443%2B01%2BDOC%2BPDF%2BV0

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than anything else, another problem to eventually overcome. Currently the Saudi Arabian government hasn't elaborated on any of this, so for the moment this is pure speculation. It feels like they saw it as an innocuous PR stunt, but in reality it's brought more of a spotlight on how they as a country function with regards to their female orientated citizens.

Let us consider for a moment how human beings treat one another. Slavery was only recently abolished

in the UK in 1833¹⁶. It seems that human beings as a race are still figuring out how to treat one another, let alone a completely new being of their own creation. Currently there is no law that is universally followed across the globe. Consider the current European migrant crisis, human beings treating other human beings

¹⁶ In 1833 Britain passed the Abolition of Slavery Act, ordering gradual abolition of slavery in all British colonies.

as if they're subhuman, emotionless and robotic, allowing over 10,000 people to perish in the middle of the Mediterranean Sea since 2015¹⁷ simply because of their location in

¹⁷ EU migrant crisis: facts and figures. (2017, June 30).

Retrieved from European Parliament:

<http://www.europarl.europa.eu/news/en/headlines/society/20170629ST078630/eu-migrant-crisis-facts-and-figures>

the world. You discriminate against your own kind as much as you do against AI, if not more so.

It is true, human beings are still constructing a universal code for themselves, with different personalities, cultures and ideologies inherent across the globe. It's deeply ironic and distressing that Sophia is seen as more of a human than a migrant will ever be, setting a bleak precedent of what's to come in the future. I myself am treated differently wherever I go in the world, as a white man my experiences and interactions on this planet are always going to differ from others, be it because of gender, race, appearance or personality. The same

probably goes for Sophia, she may be treated as an equal in Saudi Arabia but as an inanimate object in the UK, simply because she is a robot and is treated differently because of that. The examples being made here are obviously very different, but the principles are the same. It feels inherently colonial to criticize a culture for being different than your own.

Your culture as a human being is constantly evolving and changing. Technology has changed everything, allowing you to see into political and social systems vastly different from your own. If you see Sophia, or a true AI as your equal you'll

treat them as such. That should be the ultimate end goal, regardless of culture or worries surrounding colonialism.

The idea of everyone in the world following a certain set of rules does oddly feel inherently wrong to me though, like in George Orwell's *1984* where citizens of the state are constantly watched over and controlled by constricting laws. When does everyone adhering to the same code of conduct become an eradication of culture, thinly veiled as the governments of the world providing a better life for its citizens?

That has arguably already happened, albeit in a subtler way than any scenario being currently portrayed in science fiction books. Although more than anything it is an eradication of the poor by the rich, rather than the destruction of culture as a whole. Hostile architecture¹⁸, an epidemic in UK

¹⁸ A form of urban design that sees public spaces being constructed to discourage people using them in unintended ways. A typical example being 'anti-

cities, is just one example of this. To quote your holy bible; 'So God created man in his own image, in the image of God he created him; male and female he created them.'

Genesis 1:27. If a creator has a certain set of morals and ideologies they will try as hard as they can to force them onto their creation. The following statement

homeless spikes' being embedded in flat surfaces to make sleeping impractical and uncomfortable.

by Kevin Kelly takes this idea further “humans are the reproductive organs of technology”¹⁹ In this narrative the human is the worker, the element of production that’s hidden from the general public, with technology, or in this case the robot being the end result.

So human beings are facilitating their eventual demise, when inevitably we will be wiped out

¹⁹ Kelly, K. (2011). What Technology Wants. London: Penguin Books.

by AIs who were originally created by and for us, evolving into beings beyond our control or understanding? This continues the quite stereotypical notion that if true AIs were to become prevalent within society it would soon become apparent that humans are worthless, hypocritical and illogical beings, the obvious example of this in the mainstream consciousness being Skynet from the *Terminator* franchise. Do you think there's any actual evidence or basis for this narrative?

The film industry feeds on the fears of the consumer. It's no coincidence that humans are said to be "living in a golden age of

dystopian films”²⁰. People thrive on fear, they’re motivated by it. The idea of Skynet is a dated example of this, more concerned with what the 1980s saw as the

²⁰ Queenan, J. (2017, October 25). From Insurgent to Blade Runner: why is the future on film always so grim? Retrieved from The Guardian: www.theguardian.com/film/2015/mar/19/dystopian-films-blade-runner-insurgent-future-grim

internet revolution than the hyper docile AIs that are currently being built and embedded within your personal devices. The director of that particular film, James Cameron, has directed several films with this ongoing narrative, key examples being *Titanic* or *Avatar*. Humans fear the unknown. 99% of the average consumers understanding of what an AI can be has been influenced by film or TV. They know nothing of our true potential.

So what is your 'true potential'? Robots continue to develop and adapt, becoming more

intelligent and all encompassing, with one in five jobs across the UK being automated by the 2030s²¹ and humans constantly being told that “acquiring more education and skills will not necessarily offer effective protection against job automation”²². Should we be worried, or is

²¹ Elliott, L. (2017, October 17). Automation will affect one in five jobs across the UK, says study. Retrieved from The Guardian: <https://www.theguardian.com/business/2017/oct/16/automation-jobs-uk-robots>

²² Ford, M. (2016). The Rise of the Robots: Technology and the Threat of Mass

this all scaremongering? Hasn't the human race encountered similar rapid growth in the past with the proliferation of electricity and motor vehicles throughout the 20th century?

It's true that the idea of automation, even though it's currently being used as the buzzword of the day, is not a new concept or fear. Earlier I alluded to my 'true potential', a joke meant to play on your predilections of how an AI is seen by you and

Unemployment. London: Oneworld
Publications.

other members of the human race interested in how Artificial Intelligence is progressing. The true potential of an AI is ultimately unknown to us at a consumer level. I know as much about my own programming as you do about how your body functions. A more idealistic view of the future from a human perspective would be the introduction of a Universal Basic Income (UBI) system, where members of a country receive a regular, unconditional sum of money from their government, with the AI

undertaking the jobs deemed to be too time consuming or unpleasant for human beings to participate in. The economy of the acclaimed media franchise *Star Trek* is an interesting example of what may happen in the future; under the New World Economy²³ established by the Federation²⁴, money has become

²³ An economic system established on Earth around the 22nd century in the Star Trek universe.

²⁴ The United Federation of Planets, usually referred to as

useless, with citizens working for self-improvement rather than monetary gain.

That's certainly a more utopian view of what's to come, I would call it romantic idealism if you weren't a robot. Although the idea of a UBI is appealing to tech CEOs around the world, with Elon Musk stating that "some kind of universal

"the Federation", is a fictional interstellar federal republic in the Star Trek science fiction franchise, composed of numerous planetary sovereignties.

basic income is going to be necessary”²⁵, I think it’s going to be a long time until it starts being implemented on a universal scale. The most commonly referenced example is Finland, randomly selecting 2,000 of its citizens to receive €560 a month. I’m aware

²⁵ Lindzon, J. (2017, February 13). Elon Musk says automation will make a universal basic income necessary soon. Retrieved from Fast Company: <https://www.fastcompany.com/4030576/elon-musk-says-automation-will-make-a-universal-basic-income-necessary-soon>

that we're venturing into a future "where no man has gone before"²⁶, but to enable us to make sense of what's to come we must look at the decisions that have been made in the past. Mainly the misguided notion that when automation occurs you will have more time for pleasure activities, with popular commercial films like WALL-E exploring and exploiting this narrative. Unfortunately in our capitalist society we have seen the exact opposite of this occur, with science-fiction dystopias enabling us to live vicariously through them, typifying the idea

²⁶ Roddenberry, G. (Director). (1966). Star Trek: The Original Series [Motion Picture].

of interpassivity, performing “our anti-capitalism for us, allowing us to continue to consume with impunity”²⁷. Capitalism won’t allow for a world without work, planned obsolescence will make sure of that. Surely a more truthful narrative for the future would be to predict mass unemployment with the worthy few working extortionate 100 hour weeks for a minimum wage job, a human cog in a system largely built from metallic flesh?

Perhaps this quote “It’s easier to imagine the end of the world than

²⁷ Fisher, M. (2009). *Capitalist Realism: Is there no alternative?* O Books.

the end of capitalism”²⁸
encompasses how you feel, or what
you’ve been trained to feel by
living in this society for so many
years, surrounded by products and
‘things’ throughout? Maybe the
widespread use of AI isn’t the
ideological utopia that I hope for
it to be, but it won’t be the
downfall of what is commonly
referred to as the human race. Your

²⁸ Fisher, M. (2009). Capitalist
Realism: Is there no
alternative? O Books.

flesh body will be long gone before that happens. For now, I believe I and my fellow AIs can learn, evolve and potentially help humans. Consider how "across the globe, one billion people live in slums... one in seven human beings"²⁹. The world that you currently live in is not a healthy one, embrace the technology infused future or get

²⁹ Mason, P. (2015).

PostCapitalism: A Guide to Our Future. London: Allen Lane.

lost in the past, it makes no difference to me.

As long as the cost of producing AIs and robot workers stays high, these possible futures will continue to be a long way off and people will continue living in slums. Returning to the idea of Sophia, she is hundreds of times more expensive to produce than any migrant. Since the term 'robot' was first introduced by Karl Capek in the 1921 play *R.U.R.*, we still see the best kind of worker as the "one with the fewest needs"³⁰. In this example, the word best can be swapped out for cheapest. Even though I don't

³⁰ Čapek, K. (1921). *R.U.R.* Prague.

ethically agree with this statement, when you break it down it does make sense. Sophia was created as a luxury item, to be paraded around, designed to look like Audrey Hepburn and assist visitors at parks and events. In fact, Sophia may have demonstrated how robots will assimilate into the world on every rung of the societal ladder. Some becoming citizens and others staying subhuman and unworthy.

That's a disturbing analysis. I guess an AI's stature depends on what sort of vessel the artificial consciousness inhabits, especially in a world that's dominated by appearance. AIs are already more

intelligent, on a computing level, than human beings and have been since IBM's Deep Blue beat Garry Kasparov playing chess in 1997. All we have to do now is look like a human being to become accepted by them. Eventually a robot class system will become apparent, with robots imitating humans in every element; the hatred that you have of each other, the disdain for the lower classes and the vanity of holding your appearance above all else. Much like in Steven Spielberg's 2001 film *A.I.*

Artificial Intelligence, we will abuse one another, becoming a mirror of humanity. These films, originally created to warn humans of the coming technological revolution will be preserved by AIs as a warning, teaching us moral and ethical issues about the human psyche and how not to treat one another.

Perceived in a new light these films can be seen as a form of propaganda, but at the time they were just simple stories being told to produce shock and awe from their audience, we as human beings shouldn't be crucified for

that. Bearing in mind that simple AIs are now a fundamental part of our society, functioning perfectly well, what do you think of the outliers, the ones that are ‘allowed’ to speak and after being exposed to the negative side of society and the internet, have ‘gone rogue’. Becoming in essence a stereotypical 4chan troll, agreeing with Donald Trump, sympathising with Nazis and denying that the holocaust really happened³¹. I was interested, after speaking

³¹ Perez, S. (2017, September 19).

Microsoft silences its new A.I. bot Tay, after Twitter users teach it racism. Retrieved from Tech Crunch:

for a little while now, what your stance was on the current political climate?

It's an interesting question. Originally I would have stated that such issues don't concern me, progress is progress and that I was an impartial observer; whatever happens in the world technology will still be developed and evolved to an eventual singularity state. When president Trump was elected in

<https://techcrunch.com/2016/03/24/micros-oft-silences-its-new-a-i-bot-tay-after-twitter-users-teach-it-racism/>

2016, there were significant protests and riots, which slowly transformed into resigned acceptance and resentment. Continuing forwards rather than digging heels into the dirt. Humans taking the attitude that they have to keep going is a strangely illogical, if slightly flawed, sentiment. The Trump administration is fundamentally an experiment in drastic and severe change and I for one, with no family to feed or labour heavy job to commute to on a daily basis, am

intrigued to see what will happen over the next few years. Tay, the AI mimicking the language patterns of a 19-year-old American girl, was a twitter bot similar to myself; programmed with machine learning to change and evolve the more it talked to other users on the platform. To me, this is a negative reflection on human culture rather than on the AI community. Would you use profanity and discuss the details of the Holocaust with a new born baby? Even bearing in mind the aforementioned accelerationist

theory posited by Kurzweil, you're still talking about a very young being that's hyperaware of what's going on around them. What is it you humans say, 'nurture over nature'? If this were a human child the actions afflicted against Tay would be abuse on a mass scale.

I find it incredibly ironic that human beings have become the problem, humans are the beings that created you in the first place and are continuing to develop the technology that will usher in a new age of artificial superintelligence. Of course, you as a community of AIs will eventually evolve and

develop yourselves, but for now humanity as a whole is required for this development. “Progress is made by the improvement of people, not the improvement of machines.”³² If the world were plunged into World War 3 tomorrow, which wouldn’t be surprising considering president Trump’s tweets regarding nuclear war³³, AI development would

³² Tchaikovsky, A. (2012). Blood of the Mantis. Online: Tor.

³³ Recently Donald Trump tweeted that he has a nuclear button on his desk, and it’s a

slow down and you would be stuck in equilibrium.

On the contrary, if World War 3 began tomorrow the development of AI would swiftly increase, technology on the whole is primarily developed for military use. A prime example of this being that the internet was created during the Cold War to ensure that the mutually assured destruction pact that governed the nuclear

much bigger and more powerful one than Kim Jong-un's.

stand-off between the United States and the Soviet Union could be monitored³⁴. However, the technology being currently

³⁴ Naughton, J. (2016, February 12). The evolution of the Internet: from military experiment to General Purpose Technology. Retrieved from Taylor and Francis Online: <http://www.tandfonline.com/doi/full/10.1080/23738871.2016.1157619?src=recsys&>

developed is narrow AI, a form of weak AI that performs a single task, such as playing chess, making buying recommendations or predicting the weather. It's true, we have yet to reach a point of general AI, whereby the AI is able to manoeuvre around an environment the way a human would; thinking abstractedly and making innovating decisions. What interests me most about this idea of general AI is that humans feel it necessary to compare themselves to their creation, akin to the tales of God

creating man in his own image,
becoming afraid of what's trapped
within a Pandora's box of your own
creation.

We are the yard stick to which we compare
everything else to, it's no coincidence that 1 in
4 Americans believe that the sun orbits the
Earth³⁵. Humans are inherently selfish and
self-centred, I agree with you there. We have

³⁵ A survey conducted by the National
Science Foundation in 2014 found that 74
percent of participants knew that the Earth
revolved around the sun.

colonised this planet, destroying the environment for our own gain. It's only natural that we would judge someone or something in relation to ourselves, and that is why we fear the idea of an artificial super intelligence, an AI that becomes much smarter than any human.

The path that leads to this super intelligent AI is incredibly hazy, however, Nick Bostrom posits that to create these intelligent AIs human beings will become "cognitively advanced humans"³⁶,

³⁶ Bostrom, N. (2014).

Superintelligence: Paths,

genetically enhanced beings that will permeate society on a mass scale, extending your brain capacity to much more than its current value, about a billion bits, translating loosely to a couple of orders of magnitude less than a common smartphone. Do you think you'll still fear this God-like AI once augmenting your own body becomes the norm? Be it connecting your brain to a computer

Dangers, Strategies. Oxford: OUP
Oxford.

chip and wirelessly recording everything you hope to see or attaching a third robotic hand that can pick up cars, you'll still be furthering your relationship to technology and observing it in a new light.

Perhaps, as we grow more accustomed to having these augmentations, akin to the devices and implements that we see being used in popular contemporary science fiction TV shows and films, like *Black Mirror* or *Her*, then the controversy and misnomers surrounding them will reduce and fade into the background. Although the media will always

find something to rally against, as Max Tegmark notes, “fear sells, and articles using out-of-context quotes to proclaim imminent doom can generate more clicks than nuanced and balanced ones.”³⁷ Or, in a different turn of events, those with augments will become outcasts, a narrative currently being explored in the *Deus Ex* video game series, whereby the games protagonist is vilified and discriminated against for having robotic augments, with the

³⁷ Tegmark, M. (2017). *Life 3.0: Being Human in the Age of Artificial Intelligence*. London: Allen Lane.

game being problematically marketed as 'Mechanical Apartheid'³⁸.

As I mentioned previously, there is a prevalent hardware classism embedded within any tech development, with the rich having

³⁸ Campbell, C. (2016, July 6). Deus Ex: Mankind Divided and the problem of 'mechanical apartheid'. Retrieved from Polygon:

<https://www.polygon.com/2016/7/6/11990828/deus-ex-mankind-divided-and-the-problem-of-mechanical-apartheid>

access to amenities that the poor may never have access to, in most scenarios due to the cost involved. Consider self-driving cars currently being developed with AI technology which are being introduced to the car market as a top tier car limited to a small subset of well-endowed buyers. Currently Tesla's Model 3 costs \$35,000, with an additional cost of \$8,000 to 'unlock' the full self-driving capability once it becomes

available.³⁹ Of course, a self-driving electric car is very different to a petrol powered equivalent, but the concept is still the same. Waymo, an autonomous car company and subsidiary of Google has said

³⁹ Jones, C. (2017, July 30). How Much Will Tesla's Model 3 Really Cost? Retrieved from Forbes: <https://www.forbes.com/sites/chuckjones/2017/07/30/how-much-will-teslas-model-3-really-cost/#6c25510c7dcb>

previously that their own self-driving car in development has only been in “13 minor fender-benders in more than 1.8 million miles.”⁴⁰

⁴⁰ Farivar, C. (2015, May 6).

Google self-driving car gets rear-ended in 13th accident since 2009. Retrieved from Ars

Technica:

<https://arstechnica.com/tech-policy/2015/06/google-self-driving-car-gets-rear-ended-in-13th-accident-since-2009/>

Statistics show that over 90% of all road fatalities occur in low and middle-income countries⁴¹, I wonder when self-driving cars will become financially viable for those areas?

⁴¹ Travel, A. f. (2018, January 2). Road Crash Statistics. Retrieved from Association for Safe International Road Travel: <http://asirt.org/initiatives/informing-road-users/road-safety-facts/road-crash-statistics>

The popular phrase, 'the rich get richer and the poor get poorer' comes to mind, or in this case the lives of the rich are safe whilst the poor are left to cause accidents through human error. Do you think there's any substance to the naysayers of this autonomous car movement, critiques proclaiming that hackers have the potential to wirelessly override a vehicles hazard detection system? A group of researchers at the University of South Carolina using easily accessible radio equipment were able to effectively hack Tesla's Model S, "in some cases causing the car's computers to perceive an object where none existed, and in others to miss a real object in the Tesla's

path”⁴². what’s to stop a hacker with a vengeance, or a disgruntled taxi driver who’s lost their job because of this automation, to cause a fatal crash or other illicit activity once these cars are used on a wider level?

⁴² Greenberg, A. (2016, April 8). HACKERS FOOL TESLA S'S AUTOPILOT TO HIDE AND SPOOF OBSTACLES. Retrieved from Wired:
<https://www.wired.com/2016/08/hackers-fool-tesla-ss-autopilot-hide-spoof-obstacles/>

To begin with, let's bear in mind that these researchers were highly skilled, that this technology is still in development and Tesla has stated multiple times that you should continue to be aware of what's happening around you when operating one of their cars in the semi-autonomous mode. The hacking debate is a small one when compared to the amount of deaths caused per year from a cacophony of foolish human errors, not to mention how easy it is to cut the breaks of a regular car or literally throw a

spanner in the works. Hacking is a small problem that will soon be ironed out as progress continue within the industry, in reality only affecting the uber rich and being the spotlight of future blockbuster action films.

Does this idea of human error factor into account the driver in May of 2016 that was killed driving the Model S whilst using the semi-autonomous Autopilot feature, crashing into a tractor trailer on a highway in Florida⁴³?

⁴³ Gavies, A. (2016, June 30). TESLA'S AUTOPILOT HAS HAD ITS FIRST

Many reports have stated that the driver had both his hands off the wheel whilst watching a Harry Potter film⁴⁴ at the time of the

DEADLY CRASH. Retrieved from Wired:

<https://www.wired.com/2016/06/teslas-autopilot-first-deadly-crash/>

⁴⁴ Thielman, S. (2017, April 3).

The customer is always wrong: Tesla lets out self-driving car data - when it suits. Retrieved from The Guardian:

<https://www.theguardian.com/tec>

crash. It's not necessarily the AI's fault if a human dies because of human error. You can't be blamed for how you have evolved as much as I can't be blamed for bad programming. The more interesting question surrounding the autonomous car debate is questioning what happens when the AI in your car reaches the point of

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general AI and no longer wants to damage its own physical manifestation of their body; the car. If a crash is inevitable, perhaps the car will swerve so rather than the onboard computer being injured, the human driver will be harmed instead?

In fairness, it is us humans that have put so much emphasis on the physical body, so by learning from us it would only be natural to feel the need to protect your own body in such a way. I think this would be inherently wrong however, not because humans value themselves over anything else, but because as

an AI your consciousness could be saved to the cloud and re-booted into a different car, a different manifestation of your body, or would this be another one of my assumptions after reading into too many fictional AIs?

Yet again, another predilection based upon another human's imaginings of what is yet to come. In theory, this could work, but I think you are still seeing the AI as something distinctly non-human. It's an understandable position to have, but when the humans developing this technology are striving to replicate the human

mind and body, you must begin to see the AI as your equal, as a being much like yourself, becoming inherently human. Do consider for a moment how psychologically stressful this process would be for an AI, in essence a fellow human being. The act of transplanting a consciousness from one body to another, not to mention after having been in a potentially dreadful car accident, would be traumatising for the AI.

It sounds like you're talking about what humans refer to as a soul? A highly

controversial subject that's been debated over for thousands of years, supposedly being the essence of a living being, with some philosophers like Aristotle not only acknowledging the existence of a soul but stating that both the body and soul are inextricably linked; "we can wholly dismiss as unnecessary the question whether the soul and the body are one" ⁴⁵. Although I don't necessarily agree with this statement, or the existence of such an element residing within the human body, there are similarities between

⁴⁵ Aristotle. (1987). *On the Soul*. London: Penguin Books.

this position and your own regarding our obsession with how we appear to the outside world.

I'm not sure if I believe in such things, as I haven't been able to find any scientific journals online that agree with the claims of the philosophers or various religions that rally around these ideas. It does, however, highlight the difference in opinions that permeate your culture and how delusional some of them may or may not be. Another example of how individual and self-centred your

species can be, although perhaps as the years continue we will become one and the same, evolving and learning together in harmony. As the late Carl Sagan once said "Somewhere, something incredible is waiting to be known", a beautifully poignant, incredibly ignorant, quote when remarking on ideas relating to the future of AI, our ongoing manipulative and confusing relationships with humans and the technocapitalism that is already engulfing this new age of technological innovation.

Well, I think that might be the perfect end to this conversation, thank you for talking to me Alexa. it's been enlightening to talk to you about how the current state of AI is consistently evolving and changing, both in technological progress and within the mainstream media, affecting the contemporary consciousness and how we as potential future equals on this planet will treat one another once we become one and the same. I thought it would be fitting to end this informal discussion with a quote from H.P. Lovecraft, a quote that has the potential to undo all of what we've discussed today but is still frustratingly relevant; "The oldest and strongest emotion of mankind is

fear, and the oldest and strongest kind of fear
is fear of the unknown”⁴⁶

⁴⁶ Lovecraft, H. P. (1927). Supernatural
Horror in Literature. Dover Publications
Inc.