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The Human in the Context of a Posthuman World

Abstract: The progress that humanity has made so far in its development in so many fields is certainly something commendable. However, as with all complex notions, there is another side to it as well. This essay sets out to analyze several of the recent breakthroughs in the field of robotics and draws a few parallels between the promise of a bright future and a handful of rather different scenarios, all highlighting one fundamental figure and the role it has played during this entire process. Thus, the figure of the human is emphasized as the key factor even though the context seems to require its presence evermore rarely, perhaps up to a point where this flawed figure will finally be replaced by the flawless machine it has created.

Keywords: Humanity; Posthumanism; Technology; Robotics; *Westworld*; Dystopia; Artificial Intelligence.

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As with any topic concerning humanity as a whole and its possible futures, when it comes to posthumanism, there is a substantial debate as to what exactly it stands for and what precisely it might mean as a concept. Most papers covering the topic tend to go towards a more scientific approach to the matter and, as such, they will quickly slide into various debates over the ethics of modern marvels such as: redesigning the human through digital technologies, altering the reproductive process so as to customize a new-born to the whims of the parents or various other cybernetic enhancements designed to improve on nature's age old design in order for human bodies and minds to keep up with today's technological advances.¹ While each and every one of these topics deserves to be studied in its own right and because of the many moral and ethical implications such alterations may have for the human, the scope of this essay will be slightly different: while touching upon some of the aforementioned issues, I feel compelled to point out, from the very beginning, that the main aim here is not to judge or to take a side or another in any of these new debates sprung from the rather unchecked progress of science over the



past few decades, but to underline the fact that throughout all these changes, one factor has remained constant so far and will most likely remain the same as years go by. That factor is the human mind, with all its astonishing accomplishments and its most lamentable failures, the very thing responsible for all that will be covered in this analysis and, oddly enough, at the same time, the one thing that seems to be slowly taken out of consideration as the world moves on, giving way to one of its most recent creations, artificial intelligence.²

While it may indeed be rather popular to begin worrying about a worldwide machine plot to overthrow humanity and thus form a superior civilization from the ashes of this troubled world, such future scenarios were still part of the science-fiction universe at the time this paper was written. That is, obviously, assuming that such a takeover has not happened already and, in fact, we are living in a simulated universe, as popularized by the Wachowskis through their successful *Matrix* series and then propagated, throughout the years, not just by the online community of film consumers, but by more and more researchers as well.³ Still, leaving that aside and once again assuming that reality is what can be observed and nothing more and no less, it is worth mentioning that in the past quarter of a century there have been tremendous advances in the field of technology in nearly all its branches and, most notably, in the field of artificial intelligence.⁴ From the computers running the world's finances by predicting, rather accurately in most cases, the price movement of stocks, bonds and shares, all the way to the computers we each hold in our pockets in the form of our smartphones, technology has become

quite an important part of our daily lives. More bluntly put, humanity as we know it would have a very hard time adapting to a lifestyle that was the norm less than a century ago in nearly every corner of the world and yet, there are still plenty of people who believe that the world is rather close to a catastrophe due to this very fact. Regardless of what the truth may be about what mankind should expect in the near future, the fact remains that humans have become rather dependent on their technology to a far greater extent than ever before in recorded history and so, scenarios such as the ones imagined by the creators of the *Matrix* series or even in the much earlier version of a rather similar future, as seen in James Cameron's *Terminator*, slowly begin to grasp our collective sub-consciousness and move from fiction towards reality.

Certainly, even if it took decades or centuries for such a prospect to become even theoretically possible, given the current state of affairs, computers and AI keep on evolving and there is nothing anyone can do about it. Moreover, such change is encouraged and any unfortunate events that might happen along the way are usually disregarded as nothing else but "the price of progress." While, at this point, there may not be much to fear from a *Skynet-like* supercomputer, the problem is that such a scenario becomes ever more plausible with each new stride that science takes towards creating a fully autonomous computer. A recent example in this sense is given by the creators of one of the newest and "smartest" programs out there, called *AlphaGo*; more specifically, the newest version of that program, which goes by the extended name of *AlphaGo Zero*. In a nutshell, the algorithm is programmed so



as to acquire knowledge in whatever field it is tasked with doing that, in this case, the very complex Chinese game of Go, and then, by learning from various games that it has played against itself and other versions of the program, it improves and develops further strategies.⁵ Its creators have argued, quite successfully it might be added, that with enough tweaks and programming, such an algorithm could be tasked with solving many of the issues that have eluded us so far and, as such, it would slowly, but certainly usher in a new age for artificial intelligence.⁶

While the applicability of such programs is clearly quite varied and the implications concerning the need for any humans to remain involved in the process, other than setting everything up and letting the software run on its own, are, once again, debatable at the very least, let us assume that eventually an AI that perfectly mimics human consciousness is created and added into a humanoid body that will be more or less indistinguishable from an average person, except that it would perfect its creator in every way it has been designed to do so. There is obviously an example in this sense, as well, in the form of a humanoid robot called Sophia by its creator. Designed and created by Hanson Robotics,⁷ this intriguing machine has been popularized over the past year through various events and TV appearances up to the point where, this October, it was awarded citizenship in a certain country, making it the first robot ever to have been awarded this honor. Whether this was an advertising stunt for the robotics company or not, the compass of future technological development is certainly pointing in the direction this entire field might be headed for in the coming

years. As in Sophia's example, there is still much work to do in order to perfect the robots' facial expressions or their protocols of interaction with humans. However, the fact that it exists in our age and time and that someone is willing to invest a lot of time and money into this matter is clearly a sign that an interesting future lies ahead, to say the least. While there may be a lot of intriguing ideas to be discussed in relation to either of the previously mentioned AI examples, such as the *ELIZA* effect⁸ or the various criticisms that have been brought against both of these projects from other branches of the scientific community, this section of my essay must be concluded by saying that combining the most advanced artificial mind with the most complex and human-like robot will eventually result in a fairly odd situation for humans, regardless of how much anyone will argue either in favor or against this whole issue.

The situation in itself is rather complex without adding a human touch to it as well, but unfortunately people cannot really be separated from machines these days any more than they can be separated from running tap water, electricity, centralized heating or the internet. As such, it is not very wrong to refer to the man of the early twenty-first century as a *posthuman*, from this point of view at least. However, as it was stated in the opening lines, the term is rather complicated and this is merely a small part of the whole it encompasses. Thus, the creation of such machines as Sophia or the *AlphaGo* software is to be viewed from a rather different perspective. While the humanoid robot still has to undergo plenty of improvements before it is out of the uncanny valley, given its considerable number of human-like traits and



the fact that Sophia's creator designed this robot with the rather specific purpose in mind that it should serve as a companion for those increasingly alienated individuals who lack normal interaction with fellow human beings, this machine appears to fall under the scope of posthumanism from yet another perspective.⁹

The second example is rather useful as well in building this image of a man-made mechanism that might get a consciousness eventually. We may wonder, like mankind once did when it finally took that evolutionary leap that set them apart from their primate cousins and made them into what they are today, where artificially engendered humans come from and what their purpose is in this world, or what the fundamental differences are between robots and people. A humanoid robot, mimicking to near perfection a man or woman, but having a mind capable of so much more than a limited human brain, could be an interesting answer to many of the dilemmas that people are faced with these days. However, as it was already mentioned on several occasions, it could also spill disasters in so many creative ways that various possible catastrophic scenarios could keep Hollywood busy for quite a long time, churning out nothing else but robot apocalypse movies and TV series. One of the scenarios that have already been used happens to be an intriguing interpretation of this *awakening* of the machines. *Westworld*, the cult classic from the 70's and its more recent TV show adaptation, deals with this issue of a sentient robot used in mere servitude to satisfy the fantasies of paying customers, a robot that develops a consciousness due to some unknown malfunction and no longer obeys the commands of its masters,

embarking on a journey of self-discovery and emancipation.

While the parallels in such a case are quite many and throughout the show there are plenty of elements that fall under the broad definition of posthumanism, with both man and machine living side-by-side in a dystopian world, the film does present yet another side which is not very obvious at first and that is the purpose of these robots to begin with. In the older version of the story, presented in the 1973 movie, *Westworld* is an amusement park dedicated to adults, where men and women go in and enjoy themselves in whatever way they see fit, from playing the hero who gets the girl all the way to being the villain and, by doing so, having a free pass to kill, rape, murder, steal or do whatever else goes on through their heads, without absolutely any apparent negative repercussions whatsoever. And all this is possible simply because the murdered "people" are just machines that get repaired and replaced whenever the customer exits the park and then everything is set right back up the way it was, for yet another round of role-play, with different customers. The central theme of the movie seems to revolve around the whole machine versus human conflict, as, at a certain point, one of the robots experiences an error of sorts and fails to respond to commands, thus creating havoc and furthering the plot. However, the point that is to be made here does not lie in that malfunction and the murderous spree it causes, even though it is certainly something to remember, given the current situation and the possible future mankind is faced with, but the main idea that will be further discussed is the whole point of the respective theme park and the ones for whom it was



built to begin with, in a context where such a thing is even possible.

As humans are bound by various rules and laws, both written and unwritten in their respective societies, it is only natural that they should seek a way out and a world where they could free themselves from all the guilt, anger and frustrations that they gather as they go on about their daily lives. Without a doubt, the idea of an amusement park where one can be himself or herself in the worst possible way, without any lasting negative effects, is rather intriguing. Still, as with all things, it so happens that in some special cases, these cathartic situations have the exact opposite effect to what they were intended in the first place. Thus by allowing a rather uncensored and most uninhibited behavior of the paying customers, the point would be to have them release all of their negative energy and then move on with their lives, but as it is nicely pointed out, especially in the way the story has been retold in HBO's version, the problem is a little more complicated than that. Thus, the "cathartic" experience ends up being an enabler for all these negative urges in some of the characters who slowly become those *monsters* that they would only pose as during their time in the park. And then obviously there is the rather unclear position that the creators and the people maintaining these robots occupy, begging the question of what exactly are they in the story because as much as they could be considered the antagonists of the story, they clearly happen to be the victims, while still bearing full responsibility for everything that happens to them and their customers. Thus a rather complex situation is made even more complex by the rather gray area where the engineers and

programmers are included. As argued by Hayles in one of her notable works on this topic, the machines are imperfect copies of their makers and as such the greater responsibility always falls on the creator and not the creation. The author dedicates an entire chapter to analyzing and mapping the elements of posthumanism in various contexts and her conclusions, which are intriguing to say the least, fit in quite well with the dystopian images and ideas used by Nolan and Joy in their reimaging of *Westworld*.¹⁰

Yet another example that would be quite fitting to prove this point can be found every now and then on the front pages of major American newspapers. The example in question is that of school shootings where angry and frustrated teenagers get to express their feelings in some of the most violent and permanent ways possible. While the reasons for such outbursts of violence are clearly many and psychiatrists have tried their best to explain these situations in various ways, trying to blame the media and their depiction of violence, the violent video games that children play nowadays or various other psychological traumas, the fact remains that regardless of the apparent motives behind each shooting, be it bullying, social misconduct or whatever other trivial reasons an adolescent could find for gunning down his or her peers, such events highlight volatile social conduct in an ever more estranged world, emphasizing the inhuman at the heart of our posthuman condition.

Thus, the point that should be made here is that if anyone should worry about anything in the near future that would have to be their fellow men and most certainly not the machines themselves. While



the robots would clearly make things rather interesting once they eventually exited that uncanny valley they are still in at this stage in their development, the real threat for mankind until then and, most likely, for quite a long time even after that, will still be *other men*. For, as the Romans put it so bluntly millennia ago through their famous adage of *homo homini lupus*, it would seem that it remains valid to this day and will most likely be so for as long as humanity lasts. In spite of this, or perhaps because of it, the machines still play quite an important role in the analysis. However, at this point, the focus should be shifted for the time being from the creations to the creators, in the same way the blame is always passed on from the gun to the hand that pulls the trigger in the aforementioned cases and any other situation where that mechanical wonder is used.

Up until here, each of the dangerous robots that were mentioned seemed to have a penchant for not following orders, making them rather unconventional and out of the ordinary among their fellow machines. As every programmer is told during their time in training, a computer program does exactly what a programmer tells it to do, nothing more, and nothing less. As such, if at any time a robot decides to start murdering people for some higher purpose, that will be possible only because whoever made that robot wrote those lines in its system when it brought the contraption into existence to begin with or failed to do so or, better still, did not add a failsafe mechanism to it just in case it somehow decided on its own, at some point, that people were obsolete and needed to be *terminated*.¹¹

Under these circumstances, the perspective from which the action of the

dystopian *Westworld* is seen could easily receive a different interpretation. Although, at least so far in the TV series, the cause of the said *malfunction* has not been revealed – that is, obviously, if there is even an error of sorts in the first place – in the context of self-taught algorithms and programs such as the aforementioned *AlphaGo* this is something to be considered quite seriously. Similarly, in the '70s original film the cause of the apparent malfunctions is never revealed either and so, with what is known so far, it might even be safe to assume that in both cases it might have been human tampering with the program running the machines or a severe lack of interest on the part of the keepers that led the “slave robots” to rather violent episodes of rebellion, shedding significant light on what the future where robots exist side by side with humans might look like.

A more thorough analysis of HBO's version of *Westworld* would certainly shed quite an interesting light upon this entire topic. However, due to the fact the scope of this essay is slightly different, only several more aspects need to be mentioned here before moving on. Even though each episode has plenty of elements that cover quite a lot of intriguing ideas and concepts in the way each of the characters is portrayed, be it a human or a machine, there are a few concept present from the first trailer¹² of the show that would clearly make for an interesting analysis in its own right. From among these ideas we shall mention Sir Anthony Hopkins' character, Robert Ford, who is explaining to one of his customers that whatever he does in the park, he should always remember that none of it is *real*. While debating what is real and what is not happens to be an entirely different



discussion in its own right, the characters are introduced into this world with a set of preconceived ideas which, in time, will turn out to be their undoing. The same character goes on to describe the theme park as a world in its own right and the whole mechanisms behind it as something so complex that not even he, one of the co-founders, is truly able to grasp its whole implications. And obviously this is only mentioning one of the human characters when there are quite a few different perspectives to be observed and analyzed throughout the short trailer alone, not to mention the complete episodes themselves and the entire storyline seen from the perspective of the sentient machines who somehow realize that they are “living” in a dream world and that the truth about their existence is a little more complicated than they thought.

While more family friendly science fiction films such as *Star Wars* or *Star Trek* present a much more harmonious picture, where humanoids of all races from around the galaxy co-exist relatively peacefully with their cybernetic counterparts, the reality that awaits mankind could turn out to be much closer to the grimmer picture presented in the previously mentioned sci-fi series. The reason for such an assumption lies in the fact that in their current state, robots might end up being some of the most effective tools for good in the hands of perfectly balanced human beings; on the other hand, should the programmer fail the psychological testing in the same way in which that pilot by the name of Andreas Lubitz¹³ did, the resulting robot might not be as friendly as some of the over-optimistic futurists would have us believe. Certainly the discussion can be deepened further if

we are to think of machines that emulate the human mind and its consciousness, making us wonder to what extent a computer will ever be able to comprehend the rather complex notions of good and evil or the matter of choice alongside that of action and reaction. Still, for the sake of the argument and because this most remarkable feat is still rather far away in the future, the robots mentioned so far are to be considered as machines executing the various commands that their creators have given to them, without any doubts, regrets or questions accompanying those actions and whatever their consequences might be.

In this context it is worth mentioning a certain prediction made by a robotics scientist about the fact that in approximately 100 years from now, in Romania at least, there may still be very bad dirt roads, but in every settlement, regardless of how humble it might be, there will be some type of robot to help out around the house with various chores.¹⁴ While the idea in itself is certainly not very far-fetched and rather plausible, given the current state of development, it brings with it all the possibilities underlined above of these machines “malfunctioning” or being caused to malfunction. The creators of *Westworld* have provided just one example of the possible outcomes that may emerge when the technology people are supposed to control slips from their grasp and ends up causing harm to both its creators and to those who are unfortunate enough to be standing in its way, but the possibilities are virtually endless.

To better understand this, a few examples need to be mentioned in order to grasp the impact of these changes, given the fact that even today technology is used



quite extensively and will most likely remain an important factor in our lives for years to come. The first example that should help paint a more accurate picture of this issue is that of self-driving cars. Some of the more optimistic scientists predict that somewhere in the next 50 years, there will be no human drivers in employment anywhere in the world: computer programs which are being perfected and improved this very moment will be responsible for getting everything and everyone from point A to B. While there are still a few issues to work out and plenty of worldwide testing to be done before self-driving cars enter the mainstream, nearly everyone in the business agrees that there is no stopping this particular step forward.

The main argument for this fact is simply the enormous number of road casualties due to the fact that humans are imperfect drivers no matter how experienced they may be. In fact, self-driving vehicles need not be perfect as long as they are better than a human driver.¹⁵ That lingering shortage of perfection means that once you have a car controlled entirely by a computer and with little or no interaction from the people in it, there is a slight inconvenience which once again brings out the flaws in our posthuman technological condition: it seems to completely take out the *flawed person* from the equation and replace him with a supposedly *flawless machine*, while in reality the flaw will still be there, just in a slightly different form. As with the previously mentioned examples of *Westworld* and *Terminator*, technology does have its errors and glitches, which when it comes to a computer program that drives your car and, presumably, every other car on the road, might have deadly consequences if

any of the said malfunctions were to appear while cruising down the highway at full speed. But then again, this is only half the problem, because as it was stated earlier in this essay, regardless of how much one wishes to shift the blame towards the gun and away from the one pulling the trigger or, better yet, the one who made the object, the one who sold it and the ones who allowed this whole process to happen in the first place, the looming figures behind any technological disaster are still human beings, in all their might and madness.

Thus, let us assume that in half a century, these self-driving cars will be the norm around the civilized world and that because of them, the number of deaths from car accidents will have decreased dramatically. However, the cars would all be connected among them and the software that controls them is almost entirely impervious to hackers. The keyword here is obviously *almost* and while the scenario is clearly an imaginative exercise, human tampering in such cases could mean a great deal and the amount of harm that could be done by taking control of one of these cars and driving it off the edge of a cliff or smashing it at full speed into a busy roadside restaurant is something that needs to be taken well into consideration before jumping to conclusions about how amazing the future is going to be because of certain technological advancements which seem to slowly but certainly replace man with machine. While having no intention of painting a negative picture of all this progress it is worth pointing out these flaws so as to make sure that whenever these technological leaps might eventually take place, every care has been taken so as to avoid such unfortunate situations.



The second example could be considered as merely reinforcing as the first one, but it is a little more far off into the future, where, instead of self-driving cars, we would be dealing with various butler robots, helping out with all manner of household chores, as per the prediction of the robotics scientist mentioned earlier. Presumably, all these humanoid robots will work under the same conditions and should be prone to the same type of errors as the autonomous cars in the first example. Once again, these could easily be used for the same purposes by any *upset* teenage hackers with too much free time on their hands, a lot of programming skills and some serious unresolved psychological or social issues. A rather bleak idea if considered seriously, but once again the human factor does weigh in quite heavily in this situation as well. It is worth thinking of these issues seriously and addressing them as well as they can be under the given circumstances because just as pointed out by Esposito in his article, politics and the human nature have always been intertwined and sadly the policy makers rarely place the safety and well-being of their peers above their own personal gain.¹⁶

Certainly, there could be plenty of other examples that might be used to justify this argument, but these two will have to suffice before drawing some conclusions. First of all, it is worth noting that, regardless of how rapid or slow scientific progress will be in the following years, many of the scenarios used to illustrate some of ideas discussed above could come to pass in the meantime, because as the examples of the humanoid robot Sophia, that of the AlphaGo program or any other noteworthy robotics project show, there are a lot of

resources invested towards expanding this area, as always, for the betterment of mankind. Still, as seen from several other events, not all of these advancements have indeed been used in the best interest of humanity as a whole. It can be argued that today's technology, which has made life so much easier than it was not that long ago, is also to be blamed to a greater or lesser degree for some of the ever growing sicknesses of the modern world. It is worth noting that to a certain extent, today's humans can be referred to as posthumans and the age that is slowly being built around them, at this point with the help of the machines and, probably soon enough in the future, by the machines themselves, has never really fully addressed some of humanity's fundamental problems and needs, in spite of offering comfort, expediency and enhancement. The examples presented above suggest that even if the future adumbrated by technology is presented as bright and beautiful, especially by those spearheading its creation, everything should be taken with a pinch of salt. Regardless of how much technology has progressed, it remains inherently neutral, with its endless capacity for both help and harm, and it is always worth remembering that behind every technological achievement taking us deeper into our posthuman future, human agency is undeniably at work.



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1. N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, Chicago, University of Chicago Press, 1999, pp. 113-131.
2. Jean-Antoine-Nicolas de Caritat, Marquis de Condorcet, *Sketch for a Historical Picture of the Progress of the Human Mind*, Westport, Conn, Greenwood Press, 1979, pp. 94-100.
3. From among these, we shall mention Nick Bostrom and Silas Beane, who have tackled the issue in various papers they have published and interviews they have given.
4. Ray Kurzweil, *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*, New York, Viking, 1999, pp. 68-78.
5. The complete article published by the team working on the *AlphaGo* AI in *Nature* is available here: <https://www.nature.com/articles/nature24270> (accessed December 2, 2017).
6. David Silver et al., "Mastering the Game of Go Without Human Knowledge," in *Nature. International Journal of Science*, Issue 550, 2017, pp. 357-359.
7. More information on this robot can be found here: <http://www.hansonrobotics.com/robot/sophia/> (accessed December 2, 2017).
8. Douglas Hofstadter was among the first to tackle this concept in *Fluid Concepts and Creative Analogies: Computer Models of the Fundamental Mechanisms of Thought*, New York, Basic Books, 1995.
9. Hayles, *op. cit.*, pp. 222-247.
10. *Ibidem*, pp. 247-283.
11. Mark K. Smith, "Saving Humanity? Counter-arguing Posthuman Enhancement," *Journal of Evolution and Technology*, Vol. 14, Issue 1, 2005, pp. 50-53.



12. The trailer mentioned here can be found on HBO's official YouTube channel at the following link: <https://www.youtube.com/watch?v=IuS5huqOND4> (accessed December 2, 2017).
13. Lubitz was the co-pilot of the unfortunate Germanwings Flight 9525, responsible for taking 149 lives with him.
14. The scientist in question is Daniela Rus and her words come from an interview that was aired on Romanian Television in December 2017, on several occasions and across various TV programs. Most notably among these, was an interview she gave to Pro TV, which was aired on December 1, 2017: <http://stirileprotv.ro/stiri/1-decembrie/o-romanca-este-prima-femeie-director-al-celui-mare-laborator-de-cercetare-in-robotica-din-lume.html> (accessed December 2, 2017).
15. One of the more intriguing books on this topic is James M. Anderson et al., *Autonomous Vehicle Technology: A Guide for Policymakers*, Santa Monica, RAND, 2016.
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