

## **The Three C's of Staying Human in Robot Society**

A woman is staring at me from the screen. Even a brief look at her would be enough to conclude that she is blessed with what humans tend to call “good genes”: flawless skin, highly symmetrical facial features and shining voluminous hair. Her voice is calm and soft, yet void of any of recognizable emotion, be it joy or anger. She keeps marvelously straight posture and walks steadily, never tripping, never swaying on her feet. She looks like a flawless, ideal human being which many people strive yet fail to become. Still there is something unsettling about her beauty, something alien about her perfection. She is a mystery, until you look into her unnaturally bright emerald eyes, which spell: “SYNTH”.

A little while ago I came across a UK television series *Humans* which portray the state of the world in the aftermath of invention of anthropomorphic robots called “synths” [1]. *Synths* are built in a way which replicates human bodies with exquisite precision, so they barely can be distinguished from humans if it was not for their intense green eyes. The show focuses on the impact of such invention on interpersonal relationships and society in general, and it depicts the existential crisis and the state of denial which ordinary humans go through, struggling to find their place in the world where machines surpass humans in every possible task.

While some people may disregard the TV show as yet another sci-fi narrative, I find it especially pertinent to the current situation as it addresses two important ideas. First, the show's portrayal of AI is very similar to the way many people, who are unfamiliar with the field of AI, envision Artificially Intelligent agents – human-like robots who are programmed to do specific tasks at an excellent level and who present a danger to human society. Second, the show aims to raise the questions of what it means to be human in a technology-dominated society. If our appearances and skills are no longer distinctive of humans, which particular traits or actions define humanity? Or is there no longer such a thing as being human? If we are to answer the question of how to maintain the human face of society in the context of AI, it is critical to attend to both points.

### ***The real face of AI***

Movies like *Transcendence* and *The Terminator* acknowledge the human fears associated with the rise of AI by taking them to extreme levels and preparing us well for all kinds of haunting scenarios [2], [3]. While many people embrace the opportunities which arise with the greater integration of AI in our lives, it is true that the opposition and reluctance to accept these changes are also present. In fact, there have always been those who are scared of machines and emerging technologies, starting with Ned Ludd who allegedly smashed textile machines back in 19<sup>th</sup> century [4]. For some these technologies symbolize loss of jobs and necessity to adapt to rapidly changing job market again and again.

Furthermore, as the *Humans* TV series hints, the opposition also arises from the fact that people are scared of losing control over the situation and of losing their own significance in the world, in which computers are so much better at majority of tasks. In order to properly address these fears and come to terms with living in the world with AI, it is important to understand the current state of AI and related technologies.

So what exactly is AI? Broadly speaking, AI refers to any task which, if performed by humans, would require humans to apply intelligence to accomplish it [7]. According to Nick Heath, AI can be divided into two main categories: Narrow AI and General AI. Narrow AI is a system or a program which can be taught how to do a specific task or a set of them. It is Narrow AI which we see around us all the time: as virtual assistants like *Siri* and *Alexa*, as music recommendation system like *Pandora*, or as *Nest*, learning thermostat. General AI is vastly different from Narrow AI in that it is capable of learning a large array of seemingly unrelated tasks from baking to working in MySQL. Sounds more like AI in those terrifying movies, does not it? While General AI might be the common perception of AI, such technology has not yet been achieved. Though majority of researchers agree on the fact that Artificial General Intelligence will eventually be developed, there is no consensus as to when that would happen, with predictions ranging from 30 years to a couple of centuries.

However, one of the points sci-fi movies get right is the fact that once General AI is developed, there would be hardly any way to prevent its growth and penetration into every walk of human life. General AI would simply be so powerful in its performance that any of the current measures to control modern technologies are likely to be ineffective, and, just as Internet did, AI would drastically transform human lives.

### ***The Three C's***

Now that we know more about the state of AI today, we are more prepared to discuss the next important idea – the idea of maintaining humanity in the modern society in the context of AI.

Back in high school, during an introductory economics class, our teacher introduced us to the concept of 3 C's: Competence, Connection, and Compassion. According to the teacher, the concept of 3 C's of Leadership had gained support of many business and management experts and educators, including Peter Drucker. While my attempts to locate direct evidence of endorsement of this statement by Peter Drucker have been futile, I find the idea of 3 C's especially helpful in the context of the essay. Even though these three characteristics were initially defined as a tool to understand proper leadership, they are equally beneficial for realizing what it means to be human.

So how exactly can we interpret the famous 3 C's? The answer to such question can be achieved with the wisdom passed down by Peter Drucker in his essay "*Managing Oneself*" [5]. In this work, Peter Drucker, who saw the rise of knowledge workers, provides them with advice on the importance of managing oneself to fully achieve the most of their capabilities. While Peter Drucker's suggestions might seem related purely to work, a deeper examination reveals his advice is in fact heavily based on the peculiarities of human nature - the unique things which make us human. And it is only with respect to our humanity that we can fully realize our potential. So let us apply Peter Drucker's lessons to 3 C's to find out how to remain the most effective human versions of ourselves.

### ***C#1: Competence***

In *Managing Oneself* Peter Drucker makes profound emphasis on the importance of focusing and honing one's strengths and particular ways in which the individual performs best. He states: "*A person can perform only from strength. One cannot build performance on weaknesses, let alone on something one cannot do at all*". Mr. Drucker urges people to concentrate on their strengths and improving them. He notes how often we or people around us try to turn incompetent performers into mediocre ones, wasting energy on the areas in which we have no talent or skill. In his view such approach is simply irrational for, in his own words, "*It takes far more energy and work to improve from incompetence to mediocrity than it takes to improve from first-rate performance to excellence*". Peter Drucker recognizes how futile and unreasonable are the attempts to force oneself to go against their own nature. In his view such efforts would only result in poor performance, whereas the alternative of putting the energy and the resources into the area of competency proves to be far more rewarding and fruitful. His main takeaway is best summed as the following: "*Do not try to change yourself—you are unlikely to succeed. But work hard to improve the way you perform*" [5].

What is so important about Peter Drucker's insight? In his work he acknowledges the importance of accepting our own nature which comes with both aptitudes and flaws. Not everyone is capable of playing the flute faultlessly or of performing well in differential geometry courses. Furthermore, it is not necessary for personal success. Frankly, humans are not perfect. By accepting our limitations and instead focusing on our specific set of talents, we become aware and embrace our human nature, and we get one step closer to reaching the peak of our talents.

With the rise of AI, this advice becomes especially relevant, as algorithms and robots are becoming much and much better than humans at repetitive tasks and working with large, clear data sets. In terms of resources and energy, it is much easier and less wasteful to train a machine to become mediocre from being incompetent. Humans, who lack aptitude for that specific task, on the other hand, are more difficult to train and are more error-

prone. Does that mean humans are doomed to be replaced by Artificially Intelligent machines? Not exactly.

According Jason Hiner, AI and algorithms do work great when they experience ambiguities in data [6]. In his words: “They don't understand context or nuance, and so they aren't good at making judgment calls. That's where humans are much faster and more accurate” [6]. In other words, rise of AI provides more opportunities to exercise critical thinking skills in the area of one's expertise, and to be prepared with such skills it is crucial to find the area of your own strength so that you can utilize AI and not vice versa.

## ***C#2: Connection***

The next C on our list is connection, which Peter Drucker also addresses in his work. While AI, robots and algorithms do not rely on fellow colleagues to finish a task, this is not the case for humans. Furthermore, now that the simple tasks can be accomplished with the help of machines, developing solutions to more difficult problems requires collaboration and communication. And it is the connection between the members of organization or institution which often determines its success.

Peter Drucker's first and foremost advice is to take responsibility for relationships, which consists of two parts. First, he encourages us to accept the simple truth that “*other people are as much individuals as you yourself are*”, which has far-reaching implications. What it means is that imposing severe restrictions on the way people perform is unlikely to cause major changes in productivity and would probably result in mutual dissatisfaction of employees and employer. In Mr. Drucker's words, “*Working relationships are as much based on the people as they are on the work*” [5].

The second part of the responsibility is responsibility of communication. Every so often conflicts within organizations and institution result from the lack of awareness and communication between the different members, who do not know how and why their co-workers are working, and thus fail to accommodate each other with necessary conditions. As Peter Drucker said, “*And the reason they do not know is that they have not asked and therefore have not been told*” [5].

I have witnessed the paramount significance of communication firsthand through observing my mother's workplace – a small university in a previously mining-focused town Karaganda, Kazakhstan. Still heavily influenced by Soviet bureaucratic practices, the administration of the university would relentlessly demand its teaching staff to submit reports after reports, even though their informational value would be close to minimum. The rigid limitations imposed on the performance and work flow of the lecturers and professors resulted in low productivity of the staff, lack of enthusiasm towards their

teaching and professional activities, and corresponding retaliation from the administration with constant check-ups and examinations. The faculty's perspective on the functionality of such reports was never taken into consideration. This was partly administration's fault who could not envision any other way to perform, and partly – the fault of faculty members who did not take initiative to assert the administration of the harm which came from the method. As a result, rather than connecting people to cultivate their love for work, blunt directions from the head of the university went against creating productive work environment.

How would Peter Drucker reply to this situation? In his essay, he notes that, given the complexities of today's relationships, "*organizations are no longer built on force, but on trust*" [5]. While it does not mean that all the members have to like each other, it requires understanding of the ways in which their colleagues work. Success of a company or an institution hinges on the healthy communication between its employees. Unlike machines, we do not think in binary codes or are completely self-sufficient – we need collaborators. "*Taking responsibility for relationships is therefore an absolute necessity, a duty*", Peter Drucker would say, and he would be absolutely right [5].

### **C#3: Compassion**

For Peter Drucker management was first and foremost about human beings. In his work *Managing Oneself* he raises the critical question about conflicting values. He calls it "the mirror test", in which you ask yourself: *What kind of person do I want to see in the mirror in the morning?* [5] It is important to ensure that practices and aims of an organization or an employer do not clash with your personal values. Otherwise, as Peter Drucker warns us, working in a place which value system is incompatible with one's own would only lead to frustration and poor performance.

Peter Drucker was a great humanist. His experiences in war-torn Vienna and Nazis' horrifying crimes against humanity had profound impact on his humanitarian philosophy. As he notes in his essay "*People, I realized, were what I valued*" [5]. For Peter Drucker human integrity, morality and compassion were of paramount significance. While some business executives might have seen good character as an additional, yet not critical feature, Peter Drucker believed virtuous character was essential, by stating that "*Values, in other words, are and should be the ultimate test*" [5].

It is the question of human integrity which is of utmost importance in the context of AI. AI and related technologies make it all easier to commit potentially dangerous and even undignified actions. According to Nick Heath, latest developments in neural networks will soon allow us to create highly realistic fake photographs and imitate other's voice with high precision, which drastically increases the present threat of fake news [7].

Developments like these, if unsupervised and encouraged, are likely to contribute to massive creation of misleading, false information and may even result in loss of public trust in any video and camera footage.

And here comes the question of human character. The opportunities which arise with the development of AI are seemingly endless, and it is up to us to decide whether AI would be our doom or our blessing, at least at the current stage. An example of positive change it could create comes from another case I witnessed in my home country.

A group of young Kazakhstani girls saw the opportunity to make a transformative impact on their community by embracing the possibilities offered by emerging technologies. Even though their resources were rather limited, they came up with the idea of the safety app *QamCare*, which strives to solve the problem of feeling unsafe while walking or travelling somewhere alone [8]. They were motivated by the desire to help prevent the cases of missing people and make their community a safer place, so they created an application which allows its users to notify their trusted contacts of their location using a companion panic button. Their team managed to present the product during a global Technovation Challenge and share it with larger audience, increasing the impact of their invention. Their girls' set of values defined what they wanted to contribute to the community, and it enabled them to apply the latest technology for a humanitarian cause.

### ***Final Thoughts***

As we have discussed earlier in the essay, while AI might not be as omnipotent as sci-fi movies tend to represent it, it is present in almost every field of our lives. As any other powerful mechanism, AI simultaneously holds keys to dramatic improvement of human lives and poses a potential threat to the functioning society, if used in unethical manner. However, unlike any other powerful mechanism, once it is fully developed, AI might be incredibly difficult to prevent from penetrating every aspect of human life. The rise of AI and related technologies requires us to re-evaluate the world we live in, acknowledge the changes and reflect on how to maintain our humanity in the age of robots.

Peter Drucker and his human-centered approach is not only useful as a management tool, but also as a way to identify our human-specific needs and traits and to act upon them. The 3 C's: Competence, Connection, and Compassion, guided by Drucker's advice, help us define human ways of being a productive member of society, of contributing to community, and of staying true to human nature with dignity and integrity.

## References

- [1] *Humans* (TV series). Retrieved from [https://en.wikipedia.org/wiki/Humans\\_\(TV\\_series\)](https://en.wikipedia.org/wiki/Humans_(TV_series))
- [2] *Transcendence* (2014 film). Retrieved from [https://en.wikipedia.org/wiki/Transcendence\\_\(2014\\_film\)](https://en.wikipedia.org/wiki/Transcendence_(2014_film))
- [3] *Terminator* (franchise). Retrieved from [https://en.wikipedia.org/wiki/Terminator\\_\(franchise\)](https://en.wikipedia.org/wiki/Terminator_(franchise))
- [4] Luddite. Retrieved from <https://en.wikipedia.org/wiki/Luddite>
- [5] P.F Drucker, *Managing Oneself* (Boston: Harvard Business Review, 1999)
- [6] J. Hiner, AI and jobs: Where humans are better than algorithms, and vice versa. Retrieved from <https://www.zdnet.com/article/ai-and-jobs-where-humans-are-better-than-algorithms-and-vice-versa/>
- [7] N. Heath, What is AI? Everything you need to know about Artificial Intelligence. Retrieved from <https://www.zdnet.com/article/what-is-ai-everything-you-need-to-know-about-artificial-intelligence/>
- [8] QamCare Wins First Place In the 2017 Technovation Challenge. Retrieved from <https://innovation-village.com/qamcare-wins-first-place-2017-technovation-challenge/>