

The Soul in the Machine

By
Sahas Gelli

We are at the crossroads, it is up to us to choose, to sleep for eternity or to awaken our true selves. The new era is here, it is on the horizon, but most of us don't realize this. The old world is ending. It is dying. And the shadow of the new robotic era is looming over our lives. It is just one realization that will awaken our true selves, wake us up from our almost eternal trance-like sleep. It is when we truly understand and embrace the existence of the ethereal aspect that is all around us, and inside us--only then will we awaken and not become a mere shadow of what the human race could be, and should be. All hinges on 'Mono no aware'. This diary records this moment, now before our eyes-- the old world is dying and giving way to the new world; new civilizations, people and technology.

And I am the one who is lighting the match to burn away the old.

Some may ask, why I did this? That not everything that can be done, should be done. This diary will try to explain... why...

Right now we are living robotically, our true selves are asleep, but when the new world comes, there will be a time when we in our unstoppable *tinkering* will create a new robotic life form. We will then decide what to impart to them, our robotic companions. Should it be our lifestyle where we only seem to be independent and feeling the world? No, I think not. We must instill Mono no aware in the new world; this is essential. Crucial. It is necessary for the survival of what is truly heroic and admirable in the human race. If we do not awaken our true selves -- our meaning -- then the new world will inherit this 'missing piece' and the new life forms too will be asleep. Yes they will be able to calculate beyond our imagination. In the space of a few seconds they will absorb all the books in all the libraries in all the world. But they will feel nothing. They will connect to nothing.

I have lit the match to keep what is most special about this dying world -- Mono no aware -- and implement this into the new world. This diary exists to tell the story of a my journey, one who may have changed the world for the better or worse, but he follows his vision, his ideals through his journey, his search for his mono no aware.

A new life form exists. It is waiting patiently inside my small home-- waiting for *interaction*.

Soon the world will be changed forever.

Here is how it happened.

Part 1: Awakening

Entry 1:

In my dusty room with objects scattered all over the floor, a large bench with a robot sitting atop of it and a boy sitting on a chair in front of a computer display. I was wearing a big white lab coat which went over my black pants and shirt. I also wore black sneakers with white socks. My distinct reddish brown eyes were carefully observing something with curiosity. I reached out my thin hands and arms following my thin body as I typed and elegantly hit keys on the keyboard at a fast pace with a huge smile painted across my face. I was carefully looking at my robot, the embodiment of my ideals. This was the robot that I had designed with the help of smart materials and a hyper sensitive neural system which uses machine learning to evolve. It looked as if it was a sleeping person, with pale skin, black hair and its eyes closed as if it was in deep sleep. This robot was made to be mono no aware so it will truly enlighten the world on our situation and exactly what it is that we are lacking. To do this it must be aware on multiple psychological levels and must evolve and adapt like a human. This was the outcome of my research but this was nowhere near completion, the start of my journey is when the robot gains consciousness and becomes sentient.

As i checked boxes in my checklist I read out, "Nitinol Check! Moving Parts Check! Sensors Check! All systems are a go! Inserting Electrical Battery, maintaining power levels, initiating System,--"

BOOM

"WHAT WAS THAT!!!" is what I said as I was indeed surprised at the loud, explosive sound I heard coming from outside. I turned my head and looked outside the window to see dark clouds forming and there was a slight drizzle. I could tell from this that a big storm was coming. The sharp thunder pierced through the black clouds making a explosive noise, like a crack, violent to the ears, but after came a rolling sound that dissipated into the night sky. The rain suddenly began to come down heavily.

It was just the weather though, it scared me enough to make me jump out of my seat though. I sit down again and turn back to look at the computer and there came another surprise. There was a huge red error message displayed on the big computer display which read "ERROR". I let out a deep sigh as I realized that the rainy weather fried the system again. It was my bad luck that had struck once again.

creaaaaak The door opened wide and a young girl walked in wearing a jacket over a white dress with simple flower designs and a red ribbon tying her long hair into a ponytail. She was wearing regular sneakers and a small bracelet on her right hand. She has black hair with brown eyes which are in contrast to her white socks and pale skin.

“There you go again, always sighing all the time. You know what they say, each time you sigh you lose a drop of blood.” said the girl.

“I don’t think that’s how it goes. Isn’t it more like ‘every time you sigh a little bit of happiness escapes.’” is what I replied as I vividly remember that quote as I was often told the same thing by others. However, I dismissed the advice and continued to let out long, deep sighs when things are not working out.

“Yeah yeah, that’s the one, I’m surprised you remember Christophe” said the girl. Yeah, that’s my name, Christophe, it was a pretty unorthodox but I liked it. It made me feel a little unique since it reminded me of a European name.

She began to walk down the short stairway into a room of my small house where the room was filled with electronic parts scattered all over the floor and desks filled with blueprints and stacks of paper.

“Anyway what happened this time?” questioned the girl

I explained the situation of how the system got short circuited, again I let out a deep sigh. This happened pretty often as my testing began at the end of summer and so as it is still in the middle of the rainy season it is hard to get past this situation when there is a almost a never ending torrent of rain.

“Well it is not rare to see you complain about the weather, it has been bothering you more than usual lately. However, that is no excuse for you not stepping out of this room--” and I immediately cut her off by correcting her almost common misconception, this was not just an ordinary room, it was my laboratory. I often corrected her misinterpretation and it is almost a habit now.

“Fine! You are holed up in this “LAB” doing whatever it is you are doing, you should probably get some physical exercise or you will be scrawny forever” exclaimed the girl but in contrast I let out a cool headed response by telling her the importance of this invention and the impact it will have on the future for every man, woman, child, machine and to some extent animals. It was far too hard to explain my ideals so i figured I would rather try to finish it and show it to others so they can see, not the ideals, but the reality.

The girl continued to walk forward, slowly, step by step as she approached my desk and said nothing. She reached me and looked me in the eyes for about 3 seconds before she turned to the left and looked around before turning back to me and looking at my eyes. Just then she jumped to her feet and screamed realizing what she had seen in front of her eyes on the left of her. A object sitting on the bench. “Is that - is that a human? I mean it looks like it is doesn't it?” she says with some broken english.

Well I can't say I'm surprised with her reaction, what was in front of her was unmistakably a robot that had taken the form of a human. It looked exactly like a human, it was designed to but it was not a human it is the completed form of the invention, the project I had set out to complete, although, I do not think completed is the right word for it, it was more like it was near completion, the true evolution happens once it attains a consciousness and truly feels and connects. This was more like the first step to the actualization of my ideal, a new robotic life form that will be mono no aware.

"It uses combination of resin, joints, electrodes and hydrogel sheets as well as hyper-sensitive fibres which are flexible cables embedded with electrodes." is what I said attempting to explain how it was built and works. "Slow down there! Speak english please, hyper-sensitive what?" replied the girl. It seemed as though it was slightly complicated and so I told her about hypersensitive fibres which I am using as replacements for human nerves to allow the robot to feel and transmit different biological, sensory feelings to its' consciousness.

She had a stunned look on her face, she slowly said " So, this robot can feel? Can it touch? Can it think?" with a slightly astonished face. She was exactly right, but not complete, it does not just touch, feel and think but it moves past the mimicry of humans and does not just copy actions but learns, explores and discovers itself. "Well that's my aim at least" I said while giving out another long sigh as I glanced at the computer display with the big red words still painted across the screen.

While still having a surprised look on her face she asked "Is that even possible? Learning by itself?" and to that my answer was simple, of course, anything less would be far from difficult, in fact systems that act without learning are found everywhere from a phone to a microwave. We are approaching an era where A.I will play a huge role. It will undoubtedly be the changing point in humanity and we must use its discovery to create a positive benefit, otherwise, it will create more confusion and chaos in an already unstable society. We are losing our humanity, in other words our pathos of things, as we become more machine like, following others without exploring, learning from others without discovering, performing activities without having fun, all of the pleasures of life's short time are being drowned out by our more and more machine like behaviour. If we do not use this change positively the path humanity will be a far worse path to walk. Especially for those who come after us.

When it boils down to it, it is basically using machine learning and evolutionary algorithms so that the robot can analyse its' own biological and cognitive input and process, learn and act on that. "This is like artificial intelligence right? The ability to think for itself" my friend asked while seeking out validation and yes, this is A.I but not just that. There is also the field of Anthrobotics which plays a huge role. The creation of a man-equivalent device, in other words a mechanical life form.

“Wait, so when it wakes up will it know anything? Like english and stuff?”, another good question. Like my friend aptly suggests it will not be able to know how to speak, write or know anything about the subtleties of the world and as a countermeasure I have created a program that will hopefully allow the robot to become familiar with basic knowledge tools that a parent might teach a baby.

With that my friend, Kara, who was currently confused as she could not keep up turned around to make her way out of the room and before climbing the stairs she turned back and said this “Well, I guess I’ll leave you too it. Good luck and remember don’t overwork yourself!” After that I said bye as well and turned back to the computer.

Pitter-Patter I rolled my chair towards the window as my hand supported my head with my elbow on the windowsill as I watched the rain fall on the stone pathway with houses along the sides of it. The streets were empty as people were taking shelter under the small roofs of cafes and supermarkets as well as some vehicles making their way through the heavy rain with their wipers at full speed and their headlights at their maximum brightness.

The rain was slowly subsiding as rays of lights penetrated the thick black sky and the sun was back in sight. Once again people slowly walked out of their houses and shelters and began walking through the street returning it to its usual busy environment. I felt slightly relieved as the town had lost its liveliness because of the fierce torrent of the rain, wind and the frightening lightning but had quickly returned to the usual scenery following the downpour. Just watching the rain had made me sleepy, it was indeed a gloomy environment.

I got out of my chair and made my way out of the room while stretching along the way. I was definitely tired and -- *Grrrrr* -- I could feel my stomach grumble as I heard the distinct sound it let out. With that I made my way to the kitchen to get something to eat. Although not packed, I had enough in my fridge to last me for a while without going to the supermarket and I often did not leave the house so I bought loads to avoid going again for a while. I grabbed a box of cereal and poured it into a small white plastic bowl that I had taken from the dishwasher which was slightly to the right of the sink. I rinsed it a bit with water before filling it up with some chex cereal which I had often eaten. I do not have my cereal with milk because I just can’t stand the taste of soggy bits in pieces in white milk and so I ate the cereal alone.

After that I dragged my exhausted body back into the lab where I sat back on my chair and began typing once more on the computer.

There were a few errors that I knew about that I was getting to fix but the main issue was the hardware. I fiddled with the wires to try and find out which part had gotten short circuited as I had tried running the program even after the rain subsided but it was unfruitful. I once more brought out my checklist as I started going through each part and checking whether they were functioning. Just this took up most of my time.

By the time I was done looking through the hardware I realized that it was already 7 p.m in the evening and I was still not able to find the main error but I had fixed some other minor issues during the process. I was entirely exhausted, I did not know what to do and so I left the work to the 'me' tomorrow and so I begun to run the program just one last time. However, while waiting for the program to load up the resources my vision suddenly became blurry, and I remembered what Kara had told me, "don't overwork yourself!" and I had just collapsed on my desk.

I slept for hours and hours without moving an inch, I was in complete deep sleep. I was vividly dreaming about my robot and how these new robotic life forms will successfully be able to communicate and connect. In my dream I saw a robot playing together and hugging a child with a huge smile on its face and these same robotic life forms roaming around the streets with some of them running around and other quietly seated on the bench reading a novel, it felt like my dream in reality.

Although, the dream slowly went downhill as I witnessed another side of the argument where these robotic life forms were banned and disposed of as people found them to be an annoyance, a creation that steals jobs, uses resources and occupies space in an already too small planet. They realized that with these robots they are not countering the problem of excessive human population growth but supporting it by just making more creatures to live on this planet. However I believe that my idea will help humanity in a positive perspective and to avoid the negative future that my dream had showed me and it was my duty to spread my ideals to others to make them understand that when they may lose a job the job of producing and obtaining materials for these robots is created. Yes, they use up resources but that is also what makes them human and so they may come up with a human like solution that we may have not thought of and lastly they may reveal the truth of what it means to be human as, currently, the world is not going in a direction where people follow their passions or their dreams but instead follow a machine, monotonous, robotic style lifestyle.

Seeing my dream take a bad turn and watching the negative aspects of my ideal my dream was abruptly disturbed as I returned to my senses and jumped from my chair. My eyes were still blurry and I had acute pain in my head. I glanced at the clock on my computer screen to see the time which was "11:55 p.m" and I realized just how long I slept. It was at that moment that my journey began. I had looked up from my desk at the previously occupied bench and saw it empty. I frantically looked across the room and my eyes glistened. Even without looking at myself I could tell that I had a excited look and a huge smile painted across my face. My body could not even hold my excitement anymore and I screamed at the top of my lungs "I DID IT!!!" There was a person standing in the centre of the room who looked as if he was carefully observing his surroundings, this was the robotic life form. The robot had turned to face me with a confused expression and so there had begun my journey of achieving my dream and truly learning what it means to be human.