



HUNTING FOR GENIUS. WHAT IS BRILLIANCE? CAN A.I. BE BRILLIANT?

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Abstract: This paper concerns the common features exhibited by geniuses and the ingredients which forms the recipe for a genius. It analyses the creativity of some of the most remarkable geniuses of mankind who have generated scientific theories and inventions, which brought our civilization further and further, in both, technology and in understanding our Universe. It presents what these geniuses had in common and what differentiated them from the common people, and also how they succeeded to achieve what they created. In its last section, this paper analyses the question whether A.I. could be brilliant or not and gives extensive explanations for the verdict regarding the potential brilliance of A.I.

Keywords: genius, brilliance, creativity, problem solving, invention, madness, craziness, A.I.

1. INTRODUCTION

*“Magic theater,
Entry is not allowed to anyone...
Only for crazy people ..”*

Quoted from „The Steppenwolf” by H. Hesse, Nobel [6]
Prize Laureate for literature

People often times think about geniuses that they are those who effortlessly solve problems or came up with brilliant ideas, out of nothing, and can invent things or discover scientific theories, almost without any effort, based on their capacities and brilliance. But nothing is further from truth than that.

Real geniuses whose names remain for eternity have the ability to work harder than the other ones around them and to focus on the problems they want to solve.

This has been stated Einstein, according to whom: “genius is 5 percent inspiration and 95 percent transpiration”, and it is also historically confirmed, because in the same time with Einstein, there was an American contemporary with him, William James Sidis, who was presumably the most intelligent person and had an I.Q. much higher than that of Einstein, but he achieved, despite his intelligence, almost nothing and is long time forgotten while Einstein is recognized to be one of the most remarkable geniuses.

What differentiated them? It is exactly the work and effort which has been made by Einstein in comparison with Sidis, and this fact has been brilliantly intuited by Einstein when he made the above statement.

2. WHAT IS BRILLIANCE?

Human mind is not made to work at high frequencies, in high excitation states, usually determined either by special features of one’s brain or by stress factors like sleep deprivation or drugs abuse. Once entered in such a high frequency or high excitation state of mind, human brain is able to make connections and to find and explore ideas which are not available to common people.

Some of the ones entering such brain excitation states can hugely benefit of those states of mind either by having highly creative thoughts and creating amazing inventions or by finding solutions to great problems of science and technology.

Some others are entrapped in those states of minds, with no benefit at all, and these ones are usually forced shut down by tranquilizing medical treatments designated to reset them.

Some of them, however, refuse treatment because of the unusual sensations and richness of the world they discover when experiencing these states of mind.

But the most brilliant ideas can be generated during these controlled high frequency states of mind. Some of the ones able to master somehow those high frequency states of mind of theirs and to use them to create inventions or to solve problems are the most creative and brilliant people; they are the real geniuses of the mankind.

Very few people, however, have this amazing ability to control their high frequency states of mind. It is believed that one of the geniuses able to control these high excitation states of mind and to use them to create



outstanding inventions was the brilliant N. Tesla, who was presumably taught, since early childhood, by his mother, to control his creative states of mind.

Reverting to the question: "What did all geniuses have in common?", it seems that their success is almost always determined by their work and their effort to pursue a certain idea or goal.

They are mostly autodidacts who study and know all what is related to their purpose and they have the capacity to absorb all the information related to their scientific goal.

Another common feature of the geniuses is that they all had extraordinary and unusual intellectual abilities, which on one hand permitted them to have such brilliant ideas and on the other hand allowed them to focus on the solving of their problems, much better than average people, in order to make such new extraordinary discoveries.

These unusual intellectual abilities of theirs caused by their brains differently wired than in the case of common people, can hardly be understood by common people, and these abilities made common people to regard the geniuses as weird, freaky or even crazy or mad persons.

The lives of these highly creative people were many times spectacular and abundant in strange and inexplicable happenings, facts and phenomena, such as presented in [1], [2], [3], [4] and [5].

Common people also give less thought to the fact that in crisis situations, not ordinary normal people are those who solve problems and come up with the solutions, but instead these unusual persons, exactly like in the case of Alan Turing.

3. FEATURES OF THE MOST CREATIVE GENIUSES

It seems that all great creative geniuses share in common one or more of the following features which make them remarkable:

1) Ability of their brain to work at high frequencies or in high excitation states, generated during sleepless nights, as in the case of Tesla, previously trained by his mother to deal with these issues. However, although many may experience such unusual states of mind, rather few have the ability to use them for creative purposes, so the ability to create in such high frequency states is not available to anyone.

2) Ability to think unconventionally, out of the box, and to relentlessly persist on an idea or onto searching a solution to a problem they want to solve, exactly like in the case of A. Einstein.

3) Ability to make huge efforts and to work very hard to relentlessly pursue an idea or a goal related to an invention or to the solution to a problem

4) Ability to be autodidact and experiment a lot. It seems that the ability of these people to be autodidact and to acquire a lot of knowledge in their area of interest is of paramount importance for their discoveries, since

many of them reject the usual education forms and replace the higher education by their own targeted hard autodidact work. All of them had an unquenched and unstoppable passion to read and to acquire as much information as possible.

Reading of immense amounts of scientific but also non-scientific literature seriously increases the capacity to imagine things and phenomena and also often enables connections between different ideas only apparently not connected with each other, thus often resulting important inventions.

They read not only into their fields of specialty but in very many adjacent fields, since many great ideas are generated also by brilliant people who are not acting in the field of science but for example in the field of literature, such as presented in [6].

It is known that Tesla, after finishing the Polytechnic University also finished the Faculty of Philosophy, [2], and Einstein also had a great interest in the philosophy and in the philosophic ideas related to science, fact which helped him to generate his renowned Relativity Theory, as presented in [3].

However, many of these people who followed higher education programs declared that the respective university programs had no contribution to the success in their lives, but nevertheless they are making such statements despite the fact that they followed the respective university programs. No one could know whether they would realize what they had in the absence of their higher education training or how this training has impacted them and formed their minds.

However, either if the respective knowledge is acquired in the school or by being autodidact, its acquiring is paramount, not only because of the information therein which helps the problem solver or inventor, but also because during an intellectual activity of any type, new connections in the brain are made and the mind is thus permanently modelled by such an intellectual activity.

The knowledge and information of their interest are not only in their fields of study for their problems, but they are reading and learning also in the other related neighbouring fields, fact which additionally develops their thinking and their ability to think in more than one simple science. This interdisciplinary thinking of them, develops their brain, on one hand, and increases their success chances, on the other.

5) Based on their acquired knowledge, they can come up with outstanding solutions to problems or inventions, even during their sleep.

6) Based on their acquired knowledge, they can come up with outstanding solutions to problems or inventions during their sport activities, when brain is detached of many of its tasks and rests and thoughts are freely wandering.

7) Sometimes, there are people who only have sheer luck combined with the ability to experiment and find solutions, purely based on their experience. But



these cases are rather rare by comparison with the other cases presented.

8) And finally, there are also some cheaters, who are actually false geniuses, which can also be creative people. They are lacking the abilities of brains of real geniuses and are cheating, by feeding their brains with drugs and substances able to stimulate and transpose them into the creative states of mind of the real

4. MADNESS AND FURY OF THE GENIUS

There is a renowned line in the “Braveheart” Hollywood Oscar rewarded movie which says: “Often times history has been written by those who have hanged heroes”. In the very same way, the history of science and of technology has been written by those who were considered crazy by their fellow countrymen or by people contemporaries with them.

Mankind almost always mocked its geniuses but the “normal average” people knew to exploit, to profit and to take advantage of those mad and crazy geniuses and of their remarkable work. They looked to them as to some kind of weirdos, completely not understanding how their lives would have been without the brilliant inventions of those special people.

These highly creative and brilliant people having the ability to find solutions to the great problems of science or having the ability to make amazing inventions, are often regarded as impertinent and not submissive. They are often not adapted persons who hardly compromise or have poor abilities to compromise and they are rarely and barely assimilated by the world and by general trends in society. This is why they are regarded not very friendly by their fellow contemporaries and they are often considered to have annoying personalities for the others.

They think and act unconventionally and many times in ways which are not understandable for the other common people.

They mostly orientate themselves according to their convictions and to their beliefs and not according to the common trends.

They isolate themselves out of more reasons: they are not understood by the ordinary people, they are relentlessly preoccupied of their problems they want to solve and they do not follow the crowd or the herd because are too intelligent for it and have no interest in the small interests of the common people.

Because of the differences and oppositions to the “world”, presented above, they often virtually become martyrs which are socially and even physically eliminated by their fellow citizens, like it is presented later in a few examples in this paper.

Few people today realize how much we owe to the geniuses who brought mankind such technologically advanced, and they also hardly realize that much of the things we take nowadays for granted were the result of the effort and of the brilliance of such “weird” persons.

natural geniuses. This is mainly the case of people involved in literature or songs writing or of some painters, and it is much rarely the case for people within the field of science.

Without them, perhaps mankind would have nowadays still struggled with stones and wooden sticks as its only main tools.

Reverting to the most remarkable brilliant people mankind has had, it is known that A. Einstein had a slightly schizotypal personality and a disorder named Asperger syndrome which allowed him to focus, for a lot of time on the very same problem, problem which eventually he actually solved it. His son also suffered from a similar related medical condition.

N. Tesla was barely sleeping and he envisioned his inventions in very peculiar ways, in the form of lights and colours, as if they were virtually “transmitted” to him. Tesla admitted that he had a nervous breakdown after finishing his studies at the University and while this malady he had envisioned many “strange and unbelievable phenomena” [2].

He often envisioned “flashes of light” and also had some very odd perceptions and sensations, closely at the edge with hallucination phenomena, and he also admits that for much of the time of his life he lived in his mind, by traveling a lot by the power of imagination into worlds unknown to him. This fact developed his ability to imagine things which later helped him to the design of his inventions.

Apart from that, his brain had an unusual capacity to work like a computer running a CAD software. He was able to add, build and remove components and parts of his imaginary inventions he designed in his mind, exactly like a computer does it.

He also admits that “all these early afflictions had however, another compensation”, as presented in [2]. This compensation was his brilliant ability to make inventions.

Mihai Eminescu, our most remarkable national genius, had also his periods of madness and two of his aunts from the mother side, Olimpia and Fevronia, lived at the Agafton Monastery in Moldova.

Despite of their brilliance, many of these geniuses, had pitiful human vices. Only to name two of them, both, Tesla and Dostoyevsky had the vice of gambling, but, with time, they also had the power to control their vices. In this light the saying of Dostoyevsky, admitting that “very intelligent people can make very foolish things”, keeps very well its validity.

At a closer look, almost any genius which created important inventions or solved serious problems, had



some kind of mental condition and it seems that this is the main ingredient of the most creative minds.

But unfortunately, not understanding the contribution of these people and very much used with their own dirt, the common people, lovers of scandal, are very used to scratch dirt and to rummage the trash, as their main activity and occupation, very much forgetting the contribution of these geniuses, and wanting to degrade them at their own level, out of envy for their achievements.

Part of this denigration of geniuses is also because of their un-negotiability and their lack of compromising. Geniuses, many times also bring, in return, to the light, the dirt and the true face and the truths of their societies, exactly like in the case of our national genius, Mihai Eminescu.

That is why, many of those uncompromising and un-negotiable geniuses are not ending well and very often they not die of natural deaths.

Visionary leaders having exceptional achievements and outstanding outcomes, like the Romanian prince, Michael the Brave (Mihai Viteazul), are also considered as crazy. Mihai Viteazul was considered at his time, by western powers and offices, as having “a crazy courage” in opposing and fighting the ottoman empire at that time, around 1600 a.D.

Both of them, Mihai Eminescu and Mihai Viteazul as well, shared the very same fate, namely they have been betrayed and killed by their own fellow countrymen.

It is also very known the case of the Romanian revolutionary Avram Iancu, a brilliant Romanian lawyer which was one of the main organizers of the Romanian revolution from 1848, and had the courage and the “impertinence” to defy the Austrian emperor Franz Joseph.

Moreover, as if all this above it is not enough, the discoveries of these geniuses are most often contradicted by those small common people, not understanding a little bit of the thoughts of these giants of thinking.

Their theories are deemed many times as outrageous and these brilliant people are to face again the dirt, until their sun shines and shows the truth to the world. Many times, however, their theories are confirmed long time thereafter, sometimes, tragically for them, even after their death.

It is already known fact and history, that also, many times, these brilliant people offering freely the understanding of our Universe, or giving to mankind their most valuable inventions are used or even misused for other low interests, purposes or propaganda, by small politicians or other people, eager to attract attention not on these geniuses of mankind, but rather on themselves.

Instead of being grateful for those brilliant people, literally giving up their lives freely, for the good of the others and of the mankind, most common people take their brilliant inventions and theories for granted, rarely appreciating the endeavours of these creative and brilliant people.

Tesla’s main objective, for example, was to provide free energy for the masses but the interests of the oil magnates and tycoon were much greater than this noble goal of this genius scientist. Since he almost did not sleep or he barely slept, he virtually sacrificed almost all his life, like a martyr for the good of mankind.

He had no wife; his only love was a couple of pigeons and their death caused him great suffering. After Tesla’s death, at the age of about ninety, American “intelligence” agencies have taken all his personal documents and his archive with plans or drafts of inventions, for purposes of “national security”.

Another brilliant person, Alan Turing has the merit to have shortened the second world war by almost four years due his invention, the precursor of the modern computer, used to decrypt the messages of the germane machine Enigma, saved the lives of many tens of millions of people.

In return, he has been virtually killed by his British fellow countrymen, by prescribing him appropriate drugs for his “condition”, whereas today, exactly those western people and nations give lessons of good practices in their modern societies, good practices to be strictly followed by the entire mankind, out of reasons of democracy, liberty and sex freedom.

Without the brilliance of A. Turing, the inventor of computer who has cracked with his machine the code of the Germane machine Enigma, these tens of millions of lives have been saved, but this fact did not matter for the British people.

He is the most brilliant British who ever lived and only in 2011, the British tried to” rehabilitate and to pardon him”, when he himself is the one who actually should pardon his entire nation, not the reverse way!

And thus, a pattern is also forming, whereas many of these brilliant, creative and highly intelligent persons were also martyrs and they also died martyred by their own fellow countrymen.

Common people almost always either do not leave anything behind them or they only leave dirt scratched from the lives of others, much more capable than they are.

Ordinary people only meticulously follow the heard with conscientiousness and they disregard the achievements of others as well as the benefits they have from these “crazy” people, nor fitting into their worldview, neither into their success patterns.

Big issues of science and mankind are always solved by these uncommon, weird, freaky and almost always un-understood geniuses, not fitting into the patterns of the common people.

It seems that the law of life evolution in its general understanding, fitting and adapting in order to survive or in order to increase the chances of survival, law which is valid at the level of the vegetal and animal kingdom, not only does not apply to humans, but is really reversed when it is about the survival of great numbers of people or even the survival of human race; the main issues of mankind are not solved by the adapted herds of people



sharing their little passions and interests, more recently on their “asocial” networks, but by these not adapted, peculiar and creative geniuses.

It also seems that the ability to solve complicate issues, exactly like in the case of resilient people, is owned by those who do not conform and who are considered to be impertinent and cheeky persons and at the same time, they are recognized not to think conventionally.

5. CAN A.I. BE BRILLIANT?

In the present days, one could argue that it is not necessary anymore to have all this information and knowledge needed to solve the problem, in one’s own brain, since it is effortlessly and freely available by means of the internet and of the artificial intelligence.

This statement is far from truth, since was already explained above that the connections within this knowledge and information are made by the brain of the genius, whose brain, moreover, is additionally modelled while acquiring this information.

Since A.I. can hardly replicate and simulate even most simple basic life intelligence processes, as a concluding and summarizing statement regarding the potential brilliance of A.I., one can say that not only in the present, but also on the medium and long term, A.I. would not be able to achieve the level of normal common intelligence, unless major breakthroughs or discoveries, related to understanding the functioning of human brain are made. Not to mention that it could not have too soon the ability to think like a genius.

In the very same way and manner in which ordinary primitive people seek to denigrate geniuses, the present A.I. can only spy, find and recognize patterns and at most combine more or less valuable information and data, which is already available on internet.

The best which this present day A.I. can do is that it only can steal and recombine valuable information and data, data and information which is or was, however, generated also by the brilliant and creative minds of geniuses.

The present stage of A.I. is not at least the stage of the most primitive life forms on Earth. At its level nowadays’ A.I. and in this stage can only scratch and rummage through huge amounts of data which is generated voluntarily or involuntarily by people interacting with the internet and with their online environments.

A.I. having thus not at least the intelligence of the most primitive life forms and not operating at least at the level of the intelligence of those most primitive organisms, it is far away from the level of normal human intelligence, not to mention how far away it is from the intelligence level of really brilliant people.

Thus, this present level of A.I. is very much the same level of “normal and ordinary” people, scratching dirt and rummaging the trash from the lives of brilliant people, in order to discredit and to denigrate them and to

bring them to their ordinary level, as described and presented above.

Hence, present day A.I. has the same level of sophistication as that of people rummaging the trash in the lives of others.

A brilliant person however, intelligently selects and combine past and present information for his purposes and then employs his creativity and his intellectual skills and abilities to solve the respective problems.

In other words, to put it more gently, it is to be expected that A.I. will be equally brilliant as its human creator, with almost the same chances for man to be equal in its intelligence with his Creator.

Because it is not the information, or the access to data, which make inventions or make discoveries, but it is actually the human mind which makes them. The equivalent of the human mind for the A.I. is the algorithm programmed by humans, which is now, at most, at a primitive stage.

It is very long time, maybe never, until human mind alone will be able to generate something similar in performance with the human mind itself, human mind which is actually God’s Creation.

This may only be possible, in a very unforeseeable future, and only after the convergence or in a partnership between God, humans and A.I., as it presented in the paper [7].

Since God has created this marvellous creation which is the human mind, and if it is that A.I. will be able to ever be equal or even to surpass the human intelligence, this will happen only with the permission and under the supervision of God which is the Creator of the human mind, if He is to have ever, in an unpredictable future, humans as His partners [7].

6. CONCLUSIONS

People often tend to think about geniuses that they are people who effortlessly solve complicate problems or who continuously have new brilliant ideas, but nothing can be farther from truth.

Real geniuses, however, who really leave something after them, are indeed brilliant people with extraordinary mental abilities, but they also have the ability to work hard and to make huge efforts and relentlessly persist in order to pursue a certain idea or a certain goal.

One cannot, by all means, be brilliant unless one has previously acquired knowledge out of which to derive new knowledge, like solutions to problems or inventions.

This previously acquired knowledge is a sine qua non condition for all the presented cases before, so the key element to solve a certain problem is to acquire as much as possible from the existent knowledge which is directly or indirectly related to the solving of the respective problem, and only then to be able to use one’s own brain like in the case of the geniuses above.

Brilliant people have the ability to accumulate large amounts of knowledge related to their ideas or to the problems they want to solve, not only in their own field



of study but also in related fields, and this effort to read and know all what is directly or indirectly related to their field of interest, also causes permanently new connections in their brain, fact which thus causes their brain also to permanently evolve and eventually

culminates with the solving of their problem to which they gave thoughts.

The chances that A.I. will possess in the near future the brilliance of the geniuses is virtually zero and infinitely small when regarding the far future.

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