**Review Article** 

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# The uses of imagination directed thoughts in medicine based on the equivalence of mass and information

#### Abstract

The simplest evidence that what we do today affects the future is our request and motivation in thinking makes us discover and invent that affects Science, Humanity and the world. The purpose of this article is to introduce theoretical proof that will be useful in improving mental health based on the formulas of Jerzy Achimowicz (2018). These formulas can be well applied to the fields of Brain research, Neurology, Neuropharmacology and for diagnosis, detection, prediction and evidence based Medicine. It is expected that the outlined methods can provide common goals, applicable inventions and practices for Medicine, Pharmacy, Physiology, Pharmacology and Medical and Molecular Biology.

**Keywords:** chronic diseases, chemical and structural analysis, radiotherapy and nuclear medicine, quantum radiofrequency, pharmacophore modifications, combinatorial chemistry, pharmacogenetics.

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# Introduction

It is an important fact that the damaging effects of some chronic diseases in our age make the treatment of the patient difficult, considering the drug costs. Major problems with the healthcare system in our country have created some crises in terms of both lack of system and inadequate implementation. At this point, new regulations are needed in terms of their applicability in a more integrated manner with chemical and structural analysis methods of Medicinal and Pharmaceutical Sciences. Currently, in some fields of Radiotherapy and Nuclear Medicine, in addition to new applications regarding drug dosage and frequency, Quantum Radiofrequency aims to improve body functions.

Within the context of the equivalence of mass and information Project (Achimowicz J. And Pehlivan M.-2018).<sup>1</sup> Various methods can be further improved and developed based on the brain imaging in consideration of DNA repair mechanism in 528 Hz as outlined in the article and also in relation to the CIA mind control experiments 1960<sup>2,3</sup> where the minds of human subjects were tried to be controlled with drugs affecting the brain, but with the exception that the methods discussed in this article can make the treatment duration shorter for depression shorter and enables reduction in the number of the selected group of antipsychotics and for Schizophrenics as there will be decreased side effects so that the maintenance doses of medicines can be reduced or rearranged for patient to be much better, which will improve the quality of life of the patients and therefore their lifespan.

In addition to symptoms of Schizofrenia such as hallucinations, creativity also causes positive outcomes in mental health.<sup>4</sup> Further, Psychiatric disorders enhance imaginations because they "represent extremes of evolved adaptations and trade-offs."<sup>5</sup> Some studies outlined that DNA based chromosomal segments focused therapies may help more specific, more efficient and more safe treatments of Schizofrenia in combination with drugs such as Olanzapine and Aripiprazole.<sup>6</sup> These way, improving new Biotechnological drugs along with subconsciousness and imagination enhanced treatments may be introduced. One of the main advantages would be reduction of side effects of mind altering drugs and antipsychotics.<sup>7</sup>

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# Methodology

Methods that can be used for being supportive of treatments with ideal drugs and frequency

- 1) Molecular weight and determination of ideal drugs: The molecular weight of drug substances can be determined as a result of some mass measurement methods such as H-NMR,<sup>8</sup> C-NMR, HPLC and GC.<sup>9,10</sup> Appropriate drugs, whose molecular weight is determined by taking into account the patient's height, weight and age, can be determined according to the patient's condition. What is important and can be put forward as a new treatment method is that, for the sample drugs (solid formulations such as tablets, suppositories) for which structure determination analysis is performed, what other more effective and harmless drugs can be determined that are close to these drugs. In such a case, these drug molecules can be turned into better drugs with Pharmacophore and Synthetic modifications, and with Combinatorial Chemistry in a Robotic environment, they can create situations that can result in the production and licensing of similar safe drugs.
- **2) Ideal frequency methods and drug use with radio waves:** Some of the existing studies have revealed information that objects can be affected by quantum wave transmission methods.<sup>11,12</sup> If such methods can be supported by drug therapy, the electricity that can heal the diseased cells in some organs can be adjusted with artificial frequencies, allowing the patient to heal and providing life-saving and cost-effective results in getting rid of chronic and serious diseases.
- **3) Personalized treatment with pharmacogenetics:** Individual treatment can be carried out by taking blood from the person and examining appropriate treatment options with Pharmacogenetic analysis. In this context, some genes will be identified, the proteins responsible for these genetic codes will be identified and artificial proteins will be obtained from them. By combining them with biotechnological methods and Ideal Quantum Radiofrequency<sup>13,14</sup> methods, fatal diseases can be cured.

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**Detection of proteins:** In order for the treatments to give the most effective results, it is envisaged that the appropriate proteins can be scanned from Protein databases, their 3D structures are examined, and they can be applied in Biotechnological fields with methods suitable for Molecular Biology within the scope of the specified methods. At the same time, considering the income and expense prediction in terms of low cost, it is envisaged that it can make significant contributions to the patient's recovery.

**Applicable formulas and methodologies:** Electrons are considered to be almost immortal as they have a lifespan of 66000 Yotta years ie 6.6\*10^28 years.<sup>15</sup> Electrons might be connecting the total content of information and the whole matter in our universe like a neural network because they carry information with Photon.<sup>16</sup> A same or similar system applies in human brain because brain is like an electrical circuit flow consisting of axons and dentrites of neurons that enable continuous intercellular signalling resulting in memory and continuation of thinking. In addition and in relation to this concept, Mathemical modellings of thought have also been made.<sup>17</sup>

The difference between electricity flow in brain and electricity flow in non- biological system might be the reason human consciousness occurs and the language must have had important roles for differentiation of human consciousness from the consciousness of all other living species during millions of years of human evolution because the ability to self-express have a direct effect in self improvement and the improvement of memory.<sup>18</sup>

Artificial thought antidotes that can be passed back to the brain of patients who have thought disorders to correct thoughts can still be invented based on artificially created electricity flow loaded with information because the location of subatomic particles are affected by thoughts as electrons change behaviour when they are observed<sup>19,20</sup> (a possible illustration of how thought may be affecting electron rearrangement during rotation around the atomic shell is illustrated in Figure).



"Artificial thought antidotes that can be passed back to the brain of patients who have thought disorders to correct thoughts can still be invented based on artificially created electricity flow loaded with information because the location of subatomic particles are affected by thoughts as electrons change behaviour when they are observed"-From the article.

### Discussion

Methods that can be applicable to Medicine and their formulas and theoretical calculations have been introduced. Imaginary methods can also be added to the methods that would be invented to relax or make patients feel positive. What we detected additionally is that when the imagined beloved object such as chocolate or a heart made up of light is related to a certain organ in self body and touched inside that organ to repair the harmed parts of the cells or that organ, as if it is covering up the injuries and repairing the organ and cellular organelles, the patient relaxes and is motivated without much need of caffein intake. This results in making the patient or a healthy person to stay motivated and concentrate. If the imagined light or light in the form of an object is thought to provide positive feelings scuh as love and inner peace with a smile and sensation of being thankful for staying alive, it further helps to stay healthier as these have placebo effects. This was self experimented and its benefits were experienced especially to focus and continue work when tired.

While reading about Tesla, we were inspired by his fascination with numbers 3, 6 and 9. It was shown that the mathematics in 6 dimensional space can simplify the description of many phenomena starting from unified field theory, to biology and social phenomena.<sup>21</sup> "Cogito ergo sum" suggests that the consciousness, that is being per se, must be a component of the universe.<sup>22</sup>

Chirality which can be found in circularly polarized light, seems to be perfect information carrier as we can easily modulate the phase of the signal without adding any extra energy as in the case of amplitude modulation. Spirals found in DNA provide the perfect source of magnetic field when the electrons become delocalized and travel in DNA backbones. Together with 3 components of time, corresponding to past , now and the future, we are almost ready to create and transfer information how to create life.<sup>23</sup>

Is information the same as the thought, a word or an image?<sup>24</sup> Maybe it's enough to have 3 extra dimensions of information like : good , bad or neutral and then we have a perfect dimension of the universe. So many questions, so little time.

It is known that length, depth and width are the 3 dimensions of matter and as such matter has 3 dimensions but space-time is the additional 4th dimension as per defined by the equations of Albert Einstein.<sup>25</sup> Here a question comes to our mind: Can information be the 5th dimension as long photon carries information?<sup>26</sup> Theories such as string theory can help explain how the squeezed tiny subatomic particles such as quarks came together to create proton, neutron and electron as the first Hydrogen of the universe to come into existance.<sup>27</sup> The question is assuming wavelengths, vibrations and strings that behave different from the Physical matter can also be defined as additional dimensions like time, how many dimensions there are in the universe?

A relationship between information and consciousness had been first defined in an article by Jerzy Achimowicz and Mustafa Pehlivan, "Simple Theory of Mind and Body" (2018).

Everything that can be intensified in Physics can be related to the following intensity formula

#### Intensity = Power/Area

How can we relate this to thought or medical terms such as neurons? Well, the first step to achieve that would be to think about "thought intensity", which is not a nice fit with area at the beginning from what it seems. Also, keeping in mind that it is already known:

#### **Power = Force × Velocity**

We can then relate this formula to thought by substituting Power with "Thought Intensity" in the equation above (as the more intense something is, the more energy is uploaded in it as in the case of the wavelength in Physics where shortest wavelength is the most intense one which has the highest energy), Force with "Thought Force" (assuming it is yet an undefined Physical reality term to us at this stage of hypothesis) and Velocity as "Thought Speed" (Ie, how fast neurological signalling arising from excitability degree happens when we imagine something).

In this case, we have rephrased and then rearranged the equation as follows:

#### Thought Force= (Thought Intensity)/(Thought Speed)

Since Intensity itself is the result of Power/Area, and stating that we can imagine thought waves radiating over a certain place or area with a certain speed (speed of electrical signalling), it can be derived, in Medical/Biological terms, that:

#### Esg = Ip/(A\*Vns)

Where the Esg is "Energy being released from Neurological Signalling (ie, thought force)", Ip is the "Imagination Power", A is "Area where the neurological signalling radiates" and Vns is "Neurological signalling speed".

The lower the area where the thought force is being radiated or improsened within, the greater the energy that can be obtained.

Ip in the formula above, can also be expressed as "Consciousness". Therefore, the mathematical formula for consciousness would be;

#### Ip = Esg\*A\*Vns

Combining the applicable formula of consciousness and the defined travelling salesman methodologies, machines and computers can be arranged to predict and conclude much quicker and much more efficiently than usual if tools or softwares that will work based on formulated computer engineering of new softwares can be programmed. These softwares can be applied to Medical equipments such as automated speaking hypertension measuring devices and glucose watches. At the same time, if Medical devices and equipments are engineered based on the salesman problem, they would behave smart enough to detect the location of specific tumours or disease in a certain human tissue or organ via the intelligent electricity flows as in brain but the system should be arranged artifically like that of a neural network originated Biological system.

**Salesman problem:** The reason P vs NP<sup>28</sup> is important is that if people can find shortcut ways of reducing NP hard problems into P problems and solve them in Polynomial time, showing that all problems existing under the category of NP is actually P problems, then there will be many major improvements in Computational Complexity Science and related Sciences, including Physics, will be quickly and efficiently be further improved as super computers will be easily programmed.

#### Sample NP problem (Salesman problem):

A travelling salesman wants to visit 100 different cities by driving, starting and ending his trip at home. He has a limited supply of gasoline, so he can only drive a total of 10,000 kilometers. He wants to know if he can visit all of the cities without running out of gasoline.

The above problem is a sample NP (Non-polynomial) complex (hard) problem.

Suppose there are only 3 points (and therefore 3 different distances) the salesman will be travelling in between, which are from A to B, B to C and C to D, each with a different distance. If there were 4 different points to travel in between, then there would be 6 different distances instead, as if the points were A, B, C and D with varying distances, then there will be the following distances to be taken into consideration:

A to B (or B to A) B to C (or C to B) C to D (or D to C) A to C (or C to A) B to D (or D to B) A to D (or D to A)

So in total that is six distances as seen above. There is a new formula that will be introduced in this paper that gives exactly how many distances there will be for any given number of points. That formula is the following:

 $(3n^2-3n+6(n-3))/6-(n-3)$ 

Where n is the number of given points. This can be tested for situations where there are 3 or 4 points as previously discussed. For n=3, the result will be 3 and for n=4, it will be 6, for n=5 it will be 10 etc..

Back to solution of the problem, to begin with, random numbers will be given to the different distances, assuming that there are only 4 points to travel, and the proof will be based on that 4 points example but the method will remain the same in higher number of points, up to an infinite number of points. Random numbers given are the followings for each distance (let us assume that the salesman has gasoline in an amount of 49 Liters, just to put it into simple terms and numbers, and assume that he needs to travel all the following distances, also assume that he can penetrate 1 kilometer per litre of gasoline he has):

A to B (or B to A) = 3 km B to C (or C to B) = 5 km C to D (or D to C) = 6 km A to C (or C to A) = 11 km B to D (or D to B) = 17 km A to D (or D to A) = 9 km

The four points can be drawn on a paper and distances can be replaced in between them to make imagination easy. Now the method that will be described for solving this complex NP hard question will be based on the rule of 2-1-1-h-4-5-3, which simply means "take the second smallest number as your first distance, then take the smallest number as your first distance, then come back exactly the same distance (smallest distance which you previously passed), then take the longest distance, then take the fourth smallest distance, then fifth smallest and then the third smallest", the final point you will arrive,

you will be having completed all distances in the shortest possible way. Therefore, for 4 points, given the distances above, the distances that should be travelled by salesman to be able to follow the shortest possible distances possible will respectively be:

5km-3km-3km (backwards-ending up at the same point-as otherwise the shortest possible journey will not be possible)-17km-9km-11km-6km

So based on this, the salesman will begin from point C and he will move from C to B, then B to A, then from A to B again, then from B to D, then from D to A, then from A to C and finally from C to D. The point we end up is D, and the journey has completed. Addition of all these passed distances give us 54 in total, which is the shortest possible distance. And we can easily proove that through the fact that addition of all given distances is actually 51, so 54 is 51 plus the shortest given distance, which is 3 (51 + 3 = 54), which prooves the hypothesis and method.

The fact that we assumed salesman had 49 L of gasoline and that he will spend 1 L of gasoline for each 1 kilometer means the salesman will run out of gasoline before the journey as the whole journey takes at least 54 km and the sales man will be running out of gasoline at 49th km. But the important bit here is not the answer to salesman problem, the important point is to show that salesman problem which is under NP category of problems can actually be solved in Polynomial (P) time, and that is the answer to P vs NP question.

#### Question 1: How was 2-1-1-h-4-5-3 rule established?

There are 2 reasons for that becoming a rule, first, it is generisable to any other length of various distances when we have only 4 points, and the second reason is that even if we change a single distance in that given sequence of this rule, then the whole pathway will change and the total distance travelled will be more than 54, and it will not give us the correct answer, ie the shortest possible distance. No other combination can provide that, and these two key points make this a rule.

An original illustration of DNA double helix structure



Question 2: What if we have more than 4 points? Will the same rule apply then? If it will, how exactly?

Unfortunately, the 2-1-1-h-4-5-3 rule is not generisable to more than 4 points.

This algorithm and methods introduced in this paper can be used for further improving Computational Cryptography Science as well as for dimensional studies in Physics. The formulas and methods can be further improved with both mathematical modellings and also with computational and medical device development based applications for early diagnosis or prevention or detection of diseases such as local tumours or for knowing the exact Pathophysiology of human cells and tissues.

Information coding at Quantum Level as the origin of transcription and morphogenesis:



#### Chemical structure of DNA (Deoxyribonucleic acid)

Ref: National Center for Biotechnology Information (2023). PubChem Compound Summary for CID 44135672, Deoxyribonucleic acid. Retrieved August 1, 2023.<sup>29</sup>

Transcription refers to a process by which a segment of DNA is copied to RNA. This process is the first step of gene expression. Transcription is also involved in regulation of cellular shaping during morphogenesis, a process that causes a certain tissue or organ to develop its own shape by controlling spatial distribution of cells during embryonic development. The purpose of this creative review article is to bring a different perspective for explaining role of information coding and transfer that happens at Quantum level in the Biochemical evolution of transcription and morphogenesis. It is expected that via the contribution and the general sense of this article, missing Intermolecular Interactions and information coding or transfer at supramolecular level will be better highlighted for possible future explanations of transcription and morphogenesis in more detail and with more complete informative underlying mechanisms or Biochemical processes via the involvement of an additional Quantum information approach.

Supramolecular Biology is a field of study that deals with the properties of biological molecular aggregates that originate in the electronic and photonic structure of a Biomolecular system.<sup>30</sup> Our

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previous theoretical equation and its applicability to measuring brain acivity of humans in a different than usual way in relation to human consciusness with small anthenas and DNA repairing itself at a resonating frequency of 528Hz were discussed in an article that related information and mass under the project of Quantum DNA; The Equivalence of Mass and Information.

Recently, the term "Information" is being used very frequently in relation to various concepts and definitions in Scientific literature. Information is almost at the basis of understanding, usage and interpretations in many different fields of most Sciences and fields such as Computing, Physics, Mathematics, Software coding, Biochemistry, Neuroscience, Psychology, Psychiatry and in studies related to Artificial Intelligence.

The word "Information" as an English word first appeared in a written record in 1386 by Chaucer in his statement "Whanne Melibee hadde herd the grete skiles and resons of Dame Prudence, and hire wise informacions and technyges" and this was the earliest definition by means of the parts of the word "Inform" and "ation" which was intended to be used as a concept of "Informing" or "Directing" the mind to perceive, understand, interpret and process "information."<sup>30</sup>

"Information" has also been widely used and defined or involved in theoretical studies in Quantum Physics and in Quantum entanglement. In addition, certain Biological high temperature superconductivity experiments provided evidence that it is not only Quantum mechanics of electrons in Biomolecules that mainly have a role in arranging the long range Biological order in living matter but also the macroscopic Quantum ordered dynamical system of evanescent photons in water.<sup>31</sup> The discovery is important because a photon is a fundamental carrier of "information" and it carries certain degrees of freedom such as "frequency, phase, arrival time, angular momentum and linear momentum entanglement."<sup>32</sup>

Therefore, from a Bioquanta of information perspective, Biochemical systems and processes in Supramolecular Chemistry might possibly have Photon an subatomic particle enhanced informed coding instructions for enabling and completing the mentioned Biomolecular mechanisms. In other words, Information at Quantum level might be contributing to these mechanisms and processes similar to that of a computational software coding is being coded and instructed.

An important experimental evidence that certain compounds or modified elements can behave independently from the Physical and Thermochemical medium they are being exposed was the superconductivity of a modified Lead-apatite (LK-99) where the superconductivity resulted from a slight volume shrinkage independently from the external factors such as temperature and pressure. As a result of transfer of Pb (Lead) of the cylindirical column that resulted in distortion of the column interface, Superconducting Quantum Wells (SQWs) were created.<sup>33</sup>

Since electronic state for superconductivity can be created under experimental conditions, it would be a valid theoretical assumption to consider the possibility of Quantum information originated Biochemical processes for the latter and long term evolution of the genetic code, DNA transcription and morphogenesis, because superconductivity and superconductive circuits are linked to information processing and can be used for Quantum computing<sup>34</sup> and for producing artificial atoms.

Since certain models on mathematical modelling of superconductivity and Biology exist, conditions that would have

satisfied or conributed to the formation of DNA double helix structure or Hydrogen bondings to have been arranged and preserved as a result of superconductivity and hyperexcitable photon-excited electrons, in consideration and relation of the previously mentioned concept of "macroscopic Quantum ordered dynamical system of evanescent photons in water."35 This also makes sense from the point of evaluation that DNA might have initially came into existance in water, ie inside the oceans of an early earth since genetic expression is necessary for the genetic code to be produced so that the first living species who came into existance on earth might have become alive in the oceans, and especially when the importance of water for life on earth and living cells are considered; "Water is life. All living organisms are predominantly made of water: human beings about 60%, fish about 80%, plants between 80% and 90%. Water is necessary for all chemical reactions that occur in living cells- (it) is essential for food production and all living ecosystems."36 DNA itself behaved superconductive when superconducting Rhenium/Carbon electrodes deposited by sputtering on a freshly cleaved mica substrate were used for transport experiments on DNA.36

#### Conclusion

The calculations and results in previous articles have provided a theoretical proof based on Planck's constant that the very first origin of matter is information, in other words, information has mass and that also information travels across the universe. The wider ways of considerations is yet to be increased because the presented and mentioned methods can be very useful in the treatment and reduction of especially mental diseases. The age of Quantum Medicine would begin based on mechanistical and real equipment supported methodologies in Neurology and in the diagnosis or Psychiatric diseases and Neurological disorders. These are expected to serve as a basis for the development and introduction of ways to improve memory to prevent such as dementia in Alzheimer's and Parkinson's disease. Applications of the imaginations of the positive thinking based on light and frequency as a theoretical method can enable reduction of the speed of intercellular signalling speed, same way high blood pressure goes down during relaxation, and this way of thinking along with the introduced methods is therefore expected to reduce the risk of cancer or delay the possible development of certain cancer types for patients who have genetical risks and also for healthy people.

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## **Conflicts of interest**

The authors declare that there is no conflicts of interest.

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