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A New Approach to Uncertainity Problem in The Direction of Current Neuroscience and Algebraic Informations: A Brain Based Analysis

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Abstract

According to current information the secrets of the universe can not be solved by using rational numbers because the irrational numbers have been used more than the rational numbers in the creation of universe but the real values of irrational numbers have not been known. The most excellent program of brain is written in left angular gyrus in right handed persons; but unfortunately the nural networks of angular gyrus do not have the understanding ability of irrational numbers so far. And even, angular gyrus lesions can cause the loss of normal mathematical ability that this phemonon is known as The Gerstmann's Syndrome. Then, we hypothetised that it is impossible to destroy uncertainity problem unless irrational numbers are rationalised. If the neural networks of angular gyrus will more develop by evolution mechanisms, the irrationality problem would be solved in the future? Agulary gyruses analyzed a synoptically by clinical and experimental ways. We show that normal angular gyrus could not solve irrationality and the more developed neural networks of the angular gyrus could succed in the uncertainity problem solving by irrationality. Interestingly, the more clever wild cats have more mathematical ability than domestic cats because wild cats have more glial cells in their bigger angular gyruses than domestic cats. If so, has angular gyrus has not been thoroughly developed to understand irrational numbers? According to current theories, have all of us Gerstmann's Syndrome?

Keyworks: Mathematics,Neorusorgery

1.Introduction: Brain should be considered as neurocomputer working by physical laws. But brain has not been developed to solve irrationality problem in science. Because of undetermined irrational numbers and irrationality problem has a breaking efffect on the development of science and understanding of the universe. According to current information,arising from neurocomputering tecnologies, the secrets of universe can not be solved using by rational numbers. Because irrational numbers have been used more than rational numbers in the creation of the universe, but the real values of irrational numbers have not been known in spite of the developed science.

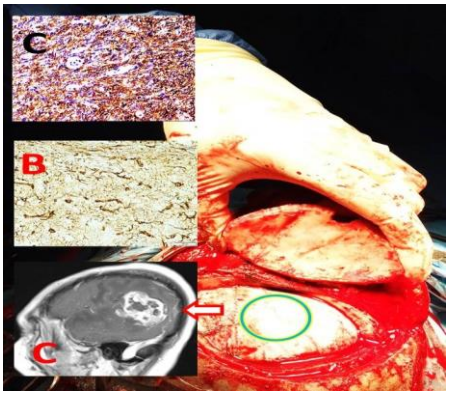

Figure-1: MRI appearances of Gerstmann's syndrome developed right handed patient secondary to glial tumor localised to left angulary gyrus (red circle/A). Appearances of glial tumor in the left angulary gyrus (base), normal glio-cytoarchitectures (B) and abnormal tumor natured glial cells are seen in angulary gyrus (C).

In neuroscience, it has been proven that excell program of brain is written in left angular gyrus in right handed persons; but unfortunately the nural networks of angular gyrus do not have the understanding ability of irrational numbers so far. Loss of normal mathematical ability is known as Gerstmann's Syndrome (Pappas, 1989). Then, we hypothetised that it is impossible to destroy uncertainity problem unless irrational numbers are rationalised. If the neural networks of angular gyrus will more develop by evolution mechanisms, would the irrationality problem be solved in the future? We believe that the more developed neural networks of the angular gyrus could succed in the should be omitted uncertainity problem solving by irrationality.

2. General Discussion

Definition of Gerstmann's Syndrome: Gerstmann's Syndrome described by Dr. Josef Gerstmann in 1924. The syndrome is characterized by agraphia/dysgraphia, acalculia, finger agnosia and delateralization between the right and left sides of one's body. The cause of Gerstmann syndrome is of the upper side of parietal lobes' damages (Wilkey et al., 2018). Gerstmann syndrome affects women and males in equal numbers and is seen in patients with focal lesions subcortically located under left angular gyrus. Functional radiological studies show a lesion just under the dominant inferior parietal cortex (2), insular or peri-insular lesion (4). Tumors, cysts, traumas, infections, intoxications, metabolic diseases an congenital

pathologies may be responsible for Gerstmann's syndrome. Diagnosis is proven by routinely radiological technics and no enough treatment way (14).

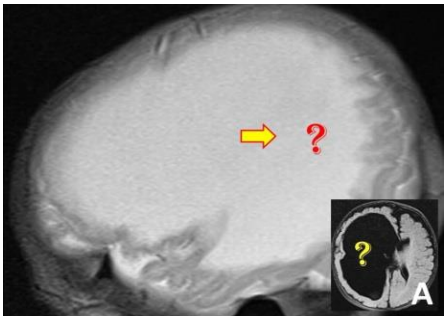

Figure-2: Mathematical intelligency is related to angular gyrus volume, neuron numbers and interneuronal communications located in parietooccipital lobes of dominant cerebral hemisphere. Angular gyrus located in left cerebral hemisphere in right handed persons (L) and right hemisphere (R) in left handed persons. Axial (A) and sagittal (Base) MRI appearances of a patient suffered from mathematical inability was detected congenitally undeveloped angulary area.

2.1.Mathematical Ability and Brain: Examples of Two Case Reports

The math and physics skills development is a critical component of early education in parallel with brain development (8). Structural and functional integrity of angulary gyrus with increased gray matter volume in the bilateral hippocampal formation and the right inferior frontal gyrus are closely related to the development of math and physcial education skills (4). Angular gyrus located in left cerebral hemisphere in right handed persons and right hemisphere in left handed persons. Although angulary gyrus has enough ability to discover simple numbers and solves simple mathematical problems (6); but it has not known irrational numbers and related problems yet!. If so, angular gyrus has not been thoroughly developed to understand irrational numbers.

We described a fifty-five year old right handed male patient with Gerstman's Syndrome which is secondary to developed of malignant brain tumor in the left angulary gyrus (Figure-1). The patient had suffered from right sided hemiparesia, delateralisation and calculation inability. He was operated and histopathological diagnosis was glioblastoma. And we described an another patient suffereing from mathematical inability secındary to congenitally undeveloped angulary area (Figure-2).

We wonder why wild cats have more mathematical ability than domestic cats and we detected that wild cats have bigger angular gyruses and they have more glial cells in their angulary gyruses than those of domestic cats. We show that the neuroglial mechanisms of how animal earn their mathematical intelligency are related to angular gyrus volume, neuron numbers and interneuronal communications located in parietooccipital lobes of dominant cerebral hemisphere ($p<0.0001$) (See Figure-3).

2.2. The Essential Role Of Mathematical Science On The Brain Development

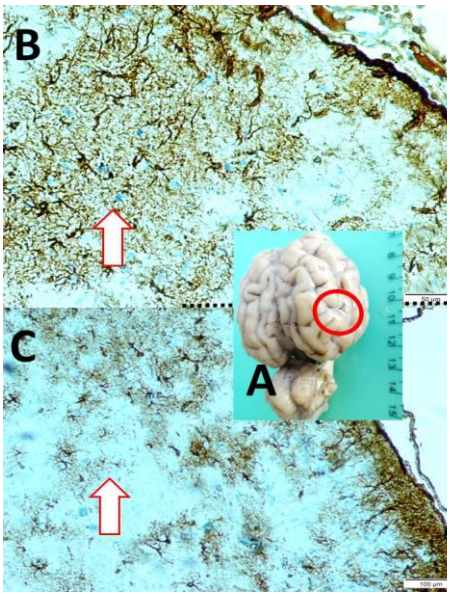

Figure-3: Wild cats have more mathematical ability than domestic cats because wild cats have more bigger angular gyruses (A) and have more glial cells more fractal differences (B) than domestic cats (C) in their angular gyruses.

It is well known that mathematical sciences are required an excellent angulary gyrus/brain to understand of rational/irrational roots of everything/universe. The recent neurohistological studies have shown that mathematical ability is directly related with geomorphological and neurohistological architectures of angulary gyrus. Postmortem examinations of Albert Einstein's brain showed that the sylvian angle was narrower in mathematicians than the others due to growed angulary gyrus. Anterior bowing of the postcentral gyrus which could have resulted from exuberant growth of the inferior parietal lobule (Salvatori R, Lancet. 1999). The wild cats are more clever and have excellent calculation capability than the domestic cats; because, wild cats are more capable and faster to climbing, catching and jumping functions which that functions are required more distant estimation capacity and more complex calculatory neural network. We showed that the angulary gyruses of wild cats'brains have more glial cells and neurons than those of domestic cats (Aydın MD, Türk Nöroşirürji Dergisi- 2018).

2.3. What are The* Irrational *Numbers? An irrational number is not defined as a fraction p/q for any integers p and q. Irrational numbers have decimal expansions that neither terminate nor become periodic. All transcendental numbers are irrational that they may not be crazy but they do sometimes bend our minds a little (10,11). Pythagoras did not imagine the irrational numbers as $\sqrt{2}$, e (Euler number), π (Pi), Φ (Golden ratio) etc. A historical perspective is represented in the figure-4.

2.3.1. $\sqrt{2}$ (1,414213….). The most nameuos irrational number is $\sqrt{2}$, also called as Pythagoras's constant. It should not be assumed that irrational numbers have nothing to do with madness. Around 500 B.C. when Hippasus imagened the irrationality of $\sqrt{2}$ he was

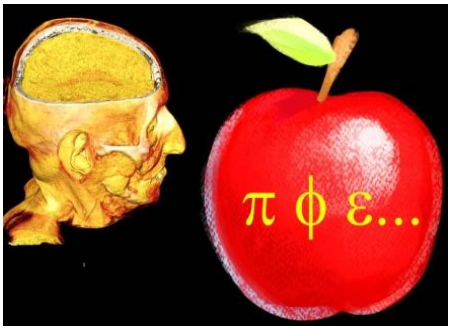

Figure-4: Irrational numbers that were not imagined by Pythagoras.

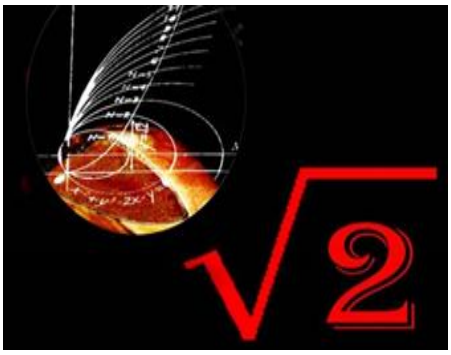

Figure-5: A memorial drawning to represent of Hippasus's status after invention of square root two in historical perspectives.

immediately killed by the fanatic Pythagoreans throwning into sea off the coast a see in a stormy day in the date of around 520 BC (5). What is His crime? Telling the world a mathematical secret of the square of two. The sacrificed of Hippasus should be required according to Pythagoreans because he expressed of all secrets related the faith of Pythagorean religion. Because uncertain idea was a dangerous belief of those who knew about it. It was a secret owned by the school of Pythagoras (7,11).

All students of Pythagoras were obsessed with the existenciy of irrationale numbers and their results. The Pythagorean's believed that "Everything is number" and the universe was built around the rationale numbers. *''All numbers from one to ten has a very special significance. Odd numbers were male and even numbers female'(7)'.* Pythagoreans found dangerous for the world. Although Pythagoras was the best scientist remembered for Pythagoras therom, no one understand the real cause of death of Hippasus because of the dangerous ratio idea. Imagine a simple square shape, each side 1 unit in length. How long is the square's diagonal? (5,12). Figure-5 shows of a memorial drawing to represent of Pythagoras's status before invention of irrationale numbers in historical perspectives.

2.3.2 ***π. (π = 3.141592...).*** The circumference of a circle divided by its diameter is always a little more than 3. In fact, the result of this division is an irrational number that we commonly refer to as π. π is part of a group of special irrational numbers that are sometimes called as transcendental numbers. These numbers cannot be written as roots, like the square root of 11. As of 2011, people have discovered more than 5 trillion digits of π but we'll never get to the end of it because there is no end! Sometimes you might see pi written as 22/7; however, be aware that, like 3.14, 22/7 is only an approximation. It is close to π but it's not equal (8). **There is no fraction that exactly equals to π. Some applications of number π are represented in** figure-6. Inner elastic membranes of arteries and cerebral gyral or sulcal convolutions represent

that shape and some diagnostic or treatment modalities may be ordered via tree dimentionally algebraic functions.

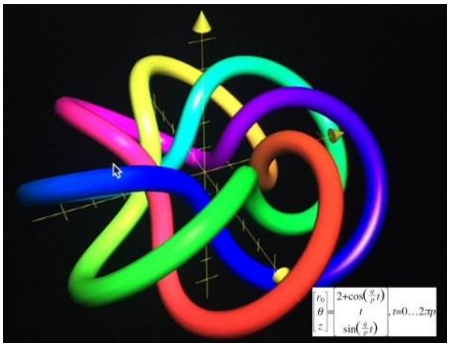

Figure-6: Some applications of number Pi. A Mathematical representation of inner elastic membranes of arteries/cerebral gyral-sulcal convolutions/intestinal morphology represent that shape and some diagnostic or treatment modalities may be ordered that tree dimentionally algebraic functions in the future (Drawned by Graphicer of Apple Computer).

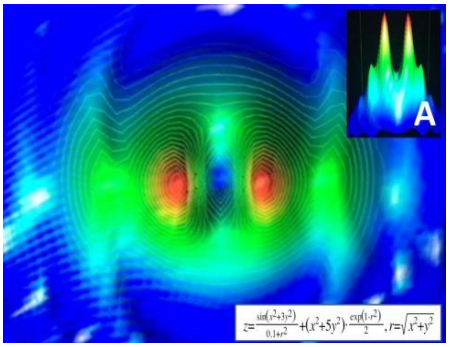

Figure-7: Some application of Euler number. Mathematical representation of tree dimentionally drawning electroencephalographic waves represented by algebraic formulas. If EEG waves can not represented by e (Euler) number series may indicate epileptic nature (Drawned by Graphicer of Apple Computer).

2.3.3. e (Euler's Number): (2.7182818284...)

To mathematicians, *e* is more than just a letter in the alphabet. The irrational number *e* is formally named Napier's constant but it is commonly called as Euler's number, after Leonhard Euler (pronounced 'Oiler'). Similar to pi, *e* occurs commonly in the real World (2). An application of Euler number is shown in figure-7 in which tree dimentionally drawing electroencephalographic waves are represented by algebraic formulas. If EEG waves cannot represented by e (Euler) number series may indicate epileptic nature.

2.3.4 . Φ (Golden ratio): (1.61803399…)

Is there a number taht is interesting to all humankind. The “golden” number is nearly equal to 1.61803399 and symbolized with a Greek letter Phi and generally known as the Golden Ratio, written by Euclid in “Elemens” around 300 B.C., in “De Divina Proportione” in 1509, by Johannes Kepler in 1600 and by Dan Brown in 2003 in his best selling novel, “The Da Vinci Code.” ‘’The Fascination of “The Da Vinci Code”. Its mathematical cousin, the Fibonacci sequence (0, 1, 1, 2, 3, 5, 8, …), both of which have roles in the plot of this murder mystery, and distinguishes between the myth and the math (7,9). The golden ratio is referred as phi and defined as the divine proportionment. Tree dimentionally drawing is represented cochlea represented by algebraic formulas. If the cochlea shape cannot represented by the Phi (Golden) number series may indicate dysfuntioned cochlea (Figure-8).

In figure-9, mathematical representation of tree dimentionally drawing appearances of Mobius Universe creation by using the all irrational numbers.

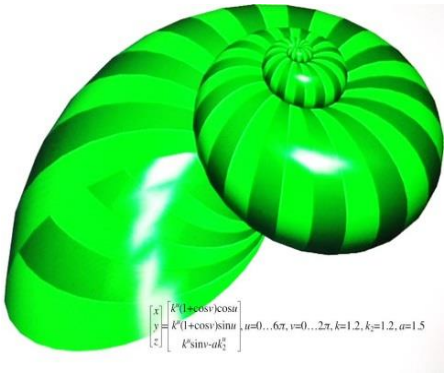

Figure-8: The golden ratio referred to as phi and defined the divine proportionment. Mathematical representation of tree dimentionally drawning cochlea represented by algebraic formulas. If cochlea shape can not represented by Phi (Golden) number series may indicate dysfuntioned cochlea (Drawned by Graphicer of Apple Computer).

3. A Brief Summary On The Failure of Angulary Gyrus

If the development of math and physics ability is a critical component of the brain development with functional integrity of the angulary gyrus, gray matter volume of the hippocampus, the right inferior frontal gyrus are closely related to the development of math skills (6,14). Why the angulary gyrus has not known irrational numbers and cannot solve related problems yet!. Presented patients samples shows a lesioned or undeveloped angular gyrus which can not imagine either rational or irrational numbers.

4. Conclusion

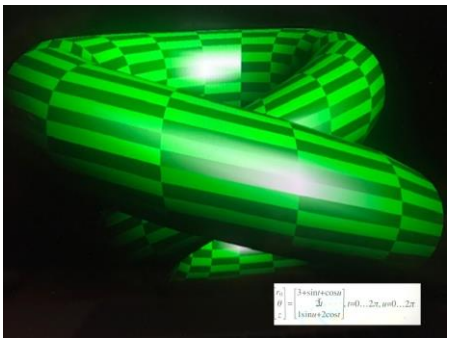

Figure-9: Mathematical representation of tree dimentionally drawing appearances of Mobius Universe creation by using the all irrational numbers (Drawned by Graphicer of Apple Computer).

According to current neuroscience and algebraic information arising from neurocomputering tecnologies, the rational numbers cannot cabaple of to understand the secrets of the universe. Although the irrational numbers have been more used than rational numbers in both of of designed of hardware and soft ware of the universe, the real values of irrational numbers have not been known in spite of developed science. In neuroscience, it has been proven that excell program of brain is written in left angular gyrus in right handed persons; but unfortunately the nural networks of angular gyrus has not the understanding ability of irrational numbers so far. If angular gyrus lesions can cause the loss of normal mathematical ability (13,15), we hypothetised that it is impossible to solve uncertainity problem unless irrational numbers are rationalised. If the neural networks of angular gyrus will more develop

by evolution mechanisms, the irrationality problem would be solved in the future?. We believe that the more developed neural networks of the angular gyrus could succed in the uncertainity problem solving by irrationality. If so, has angular gyrus not been thoroughly developed to understand irrational numbers? According to that theories, all brains described as Gerstmann's Syndrome?

5.Future Insight

Hardbrain equipment can be detected by brain imaging tecnics which is the most important determinant to estimate intellectul capacity of persons. Because knowledge and creation capacity of brain is closely related to hardbrain architecture, we insighted that brain imaging technics will be used to chose the most higher capacity persons for the employment in the future.

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