# Three Paradoxes of Thought

## **Thought Power Measured**

by Dr. Tamás Lajtner<sup>a</sup>

Abstract To understand the three paradoxes of thought, we have to understand what thought is. Thought is force. This force is a real force that makes impacts on living and inanimate, e.g. thought force creates the brain's electromagnetic signals. The existence of thought force can be captured by appropriate mechanical and electronic devices, where thought power and energy can be also measured. This study presents some values of thought power and energy measured by the first electric Thought Power Meter in the world. Knowing these values, using devices like this it is possible to control objects like computer, switch on the wall etc. by thought force. The mainstream science refuses to accept the existence of thought force.

In the second part of the study a short physics explanation is given that describes how thought force works. This physics necessarily goes beyond mainstream physics giving new definition of time and space.

Thought force is in a given size range. Like all forces, thought force also creates its own counterforce. (Thought force itself can also be a counterforce of other forces.) There is no way to understand how thought works without accepting the human experience on thought's counterforce. The counterforce and other forces in this size range can be created by lining and inanimate (non-living). Saying this, thought force can be created with and even without brains. This new recognition causes the three paradoxes of thought.

**Keywords:** thought, thought force, thought power, electronic Thought Force Sensor, Thought Power Meter, paper wheel, submarine, time, space

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"You can never cross the ocean unless you have the courage to lose sight of the shore."

Christopher Columbus, Italian explorer (1451 – 1506)

#### 1 Introduction

There are three paradoxes that summarize the working method of thought.

- 1) Your thoughts change even when they do not change.
- If you are thinking today what you thought yesterday, you are already thinking something else.
- 3) In order to remain in one place you should run.

To understand these paradoxes, we have to understand what thought is.

Thought is force. Three experiments will be presented here to prove this statement. The first experiment is carried out by the first electric Thought Power Meter in the world. It measures and displays the power of thought. Using its data, the energy of thought can be calculated. There is a small submarine in second experiment that can be lifted to the surface of water with thought force. In the third experiment there is a paper wheel rotated by thought force. These experiments prove that thought force exists, i.e. mainstream science is wrong when it denies the existence of this force.

In the second part of the study a short physics explanation is given that explains the working method of thought force. Thought force is in a given size range. There are other forces in this size range that are created by living or inanimate (non-living). Saying this, thought force can be created with and even without brains. This new recognition causes the three paradoxes of thought.

This physics necessarily goes beyond mainstream physics giving new definition of time and space.

#### 2 Electrical signals *in* brain

According to current, widespread understanding, measurable thoughts (or their effects) are the brain's electric/electromagnetic signals. These signals can be demonstrated in several ways. The devices measure either the electromagnetic activity of the brain or the electromagnetic activity of any contrast agents.

As it is well-known neurons are the basic elements of the brain. Each neuron has a negative electrical charge. If ions<sup>b</sup> with positive charges enter neurons they will be discharged. The modern brain research is able to measure the discharges of

b In the given case an ion is an atom that has a net (+) electrical charge e.g. potassium<sup>+</sup> ion, so-dium<sup>+</sup> ion

neurons. These measured values are analyzed and the result is compared with the corresponding data in a database.

In the database, the measured signal has a "thought pair" defined by a series of earlier experiments. The database and the measured electrical signals of brain together make the thoughts identifiable and measurable.

Using EEG and a computer that is able to convert the electric signals of brain into such electric signals that an electric sensor "understands", it is possible to run any devices by electric signals of brain, i.e. by thoughts.

How to measure brain's electric signals? We have many instruments [1] that can measure these signals. One of these instruments is the electroencephalograph [2].

The electroencephalograph's output varies by changes in brain's electronic signals, i.e. in the thoughts. As a result, the measurable (effects of) thought and the brain's electric (electromagnetic) signals have been synonymous. Since the brain is in the head, thoughts are also supposed to be in the head. Thought can, indeed, leave one's brain. The electroencephalograph (EEG) itself provides evidence of this, since it records data of the thought are outside the head along the skull.

Nowadays we can do more than just read information out of the brain. We can put information in the brain. The method that is able to write in the brain is called Transcranial Magnetic Stimulation (TMS) [3]. TMS is able to write information into the brain through the skull.

Brain is able to understand signals sent by TMS. On the other hand, the brain is unable to recognize that these magnetic signals are not the brain's own signals. The brain uses these signals as its own product.

Using EEG and TMS, a new communication method between two people, that is between two brains can be built. We can call this communication a kind of "telepathy" based on computers and electromagnetic waves. In the picture Sanyi "senses" Béla's thoughts. Béla's thought read by EEG, sent via Internet and written by TMS will be Sanyi's own thoughts [4].

It seems to be immaterial who or what has created these signals. If there is an appropriate signal in the brain, the brain will sense it as thought. Here information flows into one direction. From Béla to Sanyi. Sanyi cannot send information to Béla. This is one-way communication. This communication does not work without using devices EEG and TMS connected to computers. Look at Fig. 2-1.

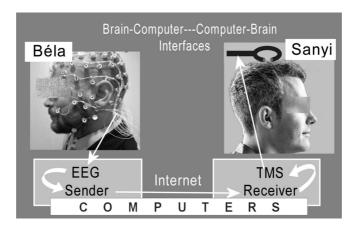


Fig. 2-1. Using computers, two brains communicate.

The computers are connected with EEG and TMS [5]. Model.
(Credit: CC BY-NC-SA 4.0 T. Lajtner, Thought is Force, 2019, Edited)

This communication works if Béla and Sanyi are in the same room or if Béla is in Europe and Sanyi is in the USA or even on the Moon. The transmission of electromagnetic waves is a well-known technology. What revolutionary new is reading information from the brain and writing it in the brain.

If Béla's brain's signals are sent to Sanyi's, and this information will appear as Sanyi's thought we can accept it: brain signals sent from human to human.

It is also possible that Béla' thoughts are stored in a computer and these stored thoughts will be sent to Sanyi, after Béla's death. It sound horrifying, but it works. Sanyi will not be able to detect when these signals were created. His brain uses these signals, when it receives it.

The next possible step is that Sanyi receives electromagnetic signals created by a computer. Look at the artistic Fig. 2-2.

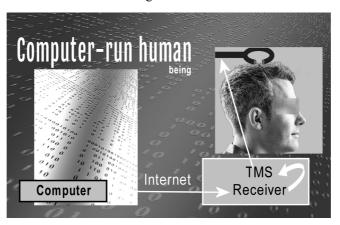


Fig. 2-2. Computer-run human being. (Credit: CC BY–NC–SA 4.0 T. Lajtner, Thought is Force, 2019)

Sanyi's brain will not be able to detect who or what has created this signal. The thoughts that will appear in Sanyi's brain are produced by a non-living inanimate thing [6]. Those "thoughts" are born from electromagnetic signals that are neither brain nor living created.

Let's summarize the above-mentioned:

- Human brains create electric signals.
- These signals can be led into other human brains (e.g. Sanyi's brain).
- The brain (of Sanyi) will not make a difference between its own electric signals or made by other brains.
- The brain accepts electric signals even if these signals are not created by a human brain, but by an inanimate (non-living) thing e.g. by a computer.

Our brain is able to create and receive thoughts. Is it unnecessary to be able to receive thoughts if nothing sends thoughts, i.e. there must be something in nature that sends thoughts. We saw in the above-mentioned that our brains are "unified", because our brains are able to receive thoughts from others. This "unified" brain is useless, and it cannot exist if brains are not connected. There must be a close connection between human brains. So the conclusion is evident: our brains are also able to send thoughts.

What can we conclude from being aware of the possibility that a computer is able to generate thoughts in human brains? We can say brain must have an additional attribute. Our brains are able to sense signals that can be converted into thoughts.

Saying this, our brains are able to create, receive and send thoughts.

### 3 Thought is an unknown force

Thought cannot be the electromagnetic signals of brain, because these are created by the meeting of positively charged ions and negatively charged neurons. Neurons do not move. Ions do. What moves the positively charged ions? It is obviously that the streams of the ions in the brain are generated by something. This something must have existed earlier than the electromagnetic signals, because it creates the electromagnetic signals. What is this something? This something is the thought.

The electric signals of brain are simply its indicators.

What is thought? How can thought move ions in our brains? Ions are real objects with mass. If thought is able to move real objects, it means that thought has

force. Where is this force? Is it in the brain? Or out of the brain? Can we measure thought force without studying the operation of brain? Yes, we can measure its effects on real objects. Can we measure these effects far from the head? Yes, we can. Does thought force use one of the four known fundamental interactions (electromagnetic force, weak force, strong interaction, gravity)? No, it does not according to the researchers e.g. according to scientists of "PEAR".

## 3.1 Mind power experiments at Princeton University (USA)

At Princeton University, there used to be a research program named Princeton Engineering Anomalies Research (PEAR 2010) [7] that studied the "power of mind". The power of mind is not the electromagnetic force of brain. The researcher wanted to go deeper, and they aimed to find the phenomena behind electromagnetism.

PEAR employed electronic Random Event Generators (REG) to explore the ability of mind. Note nowadays there are many experiments in the world that use REG-like devices. REG is an electronic device that shows the "influence of mind" on the device. The thought of a human being tried to change the normal (Gaussian) distribution that the device creates. The power of mind can be shown if the normal distribution changes. At the end of the experiment you have two functions. The theoretical one, and the measured one. If the two functions are different, then the power of mind appears in this difference. To understand the difference a statistical method is needed that can analyze all statistical values, like variances, mean values, medians etc.

There was a very small difference between theoretical distribution and the values measured by PEAR. In other words, PEAR's experiments were able to show the "influence of the mind" (thought force) on physical systems, but the results were not convincing enough.

The effect of thought occurs accidentally. The influence of thought was unpredictable and incalculable. The effect works "mysteriously", that is, the electric/electromagnetic signals of brain are unable to explain the results, and there is no theory to explain the phenomenon.

PEAR has ceased to exist, but the device REG still exists at Psyleron where they sell REGs online. Psyleron admits and presumably also Princeton University admits it that they do not understand the working method of mind power (thought force), and no theory until now has been able at all to describe it [8, 9].

PEAR was partly successful and partly controversial. It proved the existence of the power of mind (force of thought). On the other hand, the device was a "black box", and there was no explanation as to how and why thought influenced the device. REG was able to indicate the mind power (thought force). PEAR was not clearly successful, since it was unable to measure this mysterious power of

thought, and the statistical method PEAR used did not have a not too impressive statistical confidence level.

After these semi-convincing results the nature of thought has not been identified, although we do know now that thought is more than just the electric signal of brain. Thought force is able to affect objects that are outside our brains.

Note here thought power and thought force seem to be synonyms but they are not. Force and power are two different categories in physics. Force is a push or pull phenomenon that changes the motion of an object. Power is the amount of energy that is transferred per one time unit. Energy is the cause of any changes; in plain English, it is the capacity to cause move or heat.

## 3.2 Thought changes the behavior of electrical components

The assumption in the background of the following process is simple: if thought can move, push atoms (ions), thought has force. This force is likely to be able to move electrons that have much smaller mass than the mass of ions (atoms). Let us take an example: Sodium (Na) has an atomic weight of approx. 23. This means that a single atom of sodium weighs 23 atomic mass units. The invariant mass of an electron is approximately  $5.5 \times 10^{-4}$  atomic mass units. The mass of a sodium ions is about 40,000 times bigger that the mass of the electron. And the thought is able to move many ions, so the thought must also be able to move many electrons. The energy of moving electrons in a circuit can be measured. Using this method, the existence of the thought force can be proved. This is a simple theory. But how can this theory be verified, how can this be proven? If we cannot build an electrical circuit where electrons are run by thought force, the above mentioned remain sophistry.

Lajtner's Thought Force Sensor is the first Thought Force Sensor in the world [10]. It shows that thought force is able to change current and voltage in appropriate electrical circuits. These results have revolutionary outcomes. It is possible to build machines that can be run by thought force without using "brain-reading" devices.

Thought force is a real phenomenon. In the following, three different experiments will be presented on it. The magnitude of thought force is really impressive.

How does thought force work if thought force is not any of our four known fundamental interactions? To find the answer we have to know some surprising

 $<sup>^</sup>c$  In the International System of Units (SI), the unit of **force** is the newton (N). 1newton=1kg  $\times$  (1meter/1sec²).

In SI, the unit of **power** is the watt (W).  $1 \text{watt=1} \text{newton} \times (1 \text{meter/1} \text{sec})$  or 1 watt=1 joule/1 sec.

In SI, the unit of **energy** is the joule (J). 1joule=1 newton  $\times$  1 meter.

facts. Based on these facts, an outline of a physical theory of thought force can already be made.

#### 4 Three simple experiments on thought force

The following experiments make thought force "visible". Each kind of experiments is captured by video and each one can be watched here [11]. The numerical values given in the following part come from experiments that are visible on www.lajtner.com, or from earlier experiments that are no more visible on the Internet only in Lajtner's private collection.

#### 4.1 Presentation using Lajtner's Thought Power Meter

To build an electrical Thought Power Meter we have to use electrical components that are "thought-sensitive, and thought-flexible" electrical components. "Thought-flexible circuits" can be built of them. The main characteristic of these circuits is that they are able to change their electrical properties under the influence of thought force. Then, when the effect of the force of thought ceases, they return to their basic state. This is the way how the first Thought Force Sensor in the world works. Does it reliably show thought force? What is more, using a Thought Force Sensor in an appropriate electrical circuit i.e. in a Thought Power Meter we can measure the thought power measuring the changed electrical power in the circuit  $\Delta P$ .  $\Delta P$  can be given by changing current  $\Delta I$  and voltage  $\Delta U$ , look at Eq. 1.

$$\Delta P = \Delta U \times \Delta I$$
 (Watt=Volt × Ampere) Eq. 1

The changed electric power  $\Delta P$  is caused by thought power, therefore thought power is equal to  $\Delta P$ , so we know the power of thought. Let us see a diagram showing the thought power measured during the presentation on thought force. This presentation was more than just a measurement. Here the force of thought was also utilized. During the presentation the computer turned on a lamp, then turned it off, then started a coffee maker and brewed a coffee. The computer was controlled by thought force. See Fig. 4-1.

This presentation introduced the first ever thought force-run computer in the world. The whole presentation is available in Ref. 11.



Fig. 4-1. Though Power Measured by a first Thought Power Meter in the world. Thought force-run lamp and coffee machine. The person concentrates and increases his thought force and power. (Credit: © T. Lajtner, Ref. 11)

The essence of this presentation is that it makes clearly visible that thought force exists and it works. The red dots show the values of thought power.

The two wooden boxes (under the monitor) contain the Thought Force Sensor and the Thought Power Meter that measures the power of thought. The Thought Power Meter is connected to a computer. Using this configuration, it is possible to control different devices like lamps or coffee machines or anything else. The distance between head and sensor can be long, even 5 meters or more.

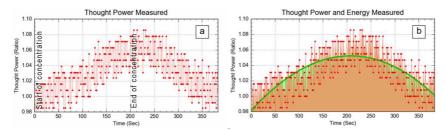


Fig. 4-2.a and b. Tought power  $P_{m}$  and thought energy measured.

The time is given in half a second. The changes of thought power measured are displayed here. The ratio  $R_{(i)}$  on the y-axis is calculated as follows:  $R_{(i)}=P_{m(i)}/P_{m(0)}$ ,

where i means half a second and i=0,1,2,..., 378.

The y-axis of the chart does not start at zero,

because thought power existed before the concentration, and its value is not measured.

Fig. 4. highlights a wavelike feature of thought power. This waving characteristic appears in every measurement. The reason of it can be either some noise or thought force simply works that way. (Credit: © T. Lajtner, lajtner.com)

Fig. 4-2. shows many interesting facts. Its most surprising fact is that thought force, power and energy can be made "visible" i.e. thought force can be measured (indirectly).

In Fig. 4-2.a. a very important fact becomes apparent. Thought power is able to move electrons, causing changes in current and voltage in an electrical device, in the Thought Force Sensor. The current changes, i.e. thought force and thought power of a person increase because of the conscious concentration of the given person. The changes of thought power are measurable with the Thought Power Meter.

Knowing, that thought force is able to create electromagnetic force moving electrons, the mystery of brain's electricity is solved. In the brain thought force moves ions. If ions are moved by thought force then the force of thought must be created before the electric waves. In other words, thought exists before the electric signals of brain.

Ions are much heavier than electrons. Is thought force also able to move bigger objects than atoms? Yes, thought force is able to move relatively large objects such as e.g. molecules or even a paper wheel. See more later.

The rise of the curve caused by concentration of a human being is clearly visible. With concentration is possible to increase the force of thought. Thought force can be consciously changed.

Fig. 4-2.a. shows also an extremely remarkable phenomenon. The effect of thought force (power) lasts almost two times longer than the concentration itself. Fig. 4-2.b. contains the ratio of thought energy. It can be calculated by calculating the area under the original curve or as a definite integral of a fitted curve. (In Fig. 4.b. a simple polynomial regression curve is fitted, degree=2.)

The amount of thought energy is much bigger than the energy of brain's electromagnetic waves. More details are coming later.

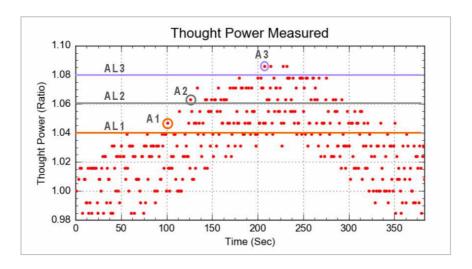


Fig. 4-3. How to control devices using thought force?
Using actions lines (AL1-AL3) and actions (A1-A3).
The time is given in half a second. (Credit: © T. Lajtner, Ref 11)

How can different devices be controlled by thought force? Very simply. Before the presentation, before the concentrated thinking there must be given Action Lines (AL). If the value of the power of thought is over the AL1 then Action1 (A1) appears, e.g. the lamp will be on. A1 occurs only in the first case when the power curve first becomes larger than AL1. When the red (gray in print) point is first time over the AL2 then Action2 comes, e.g. the lamp will be off. There were three actions lines and three actions in the given presentation. Fig. 4-3. shows them.

Of course, there are different types of Though Force Sensors. The sensor used here is a relatively slow device. There are also faster sensors that give results in a matter of seconds. Such fast sensors can be built into almost every device e.g. into mobile phones or into electric switches on the wall.

On the other hand, this "slowly" sensor is useful for everyone who wants to know how his/her own thought force works and how to train it.

Let us summarize this small chapter. We know that thought force is able to move electrons in the Thought Force Sensor, i.e. thought force is able to change the current and voltage in appropriate environment e.g. in a "thought-flexible circuit".

Thought force exists. Now we have to define what thought force is, where it is and how it works.

To understand these important things let us choose a different device. A small submarine in a glass of water.

#### 4.2 The Submarine Presentation

Here thought force brings a small submarine to the surface of the water. The distance between the head and the submarine can be long, even 5 meters or more.



Fig. 4-4. Thought force elevates the submarine.

The motion of the submarine is vertical. The energy caused by thought is calculable also in the case of submarine, because we know every detail of the experiment.(Credit © T. Lajtner, Ref 11)

60-65% of the human body and 90-95% of brain are made of water. Therefore, the submarine experiment showed in Fig. 4-4. is of paramount importance to us. If thought force is able to move the water in a glass, it is able to move the water in our body. Thoughts can heal or create new thoughts in the brain of a third person.

Like all forces, thought force also creates its counterforce. In many cases, this counterforce is hardly to sense consciously in human brain, e.g. in most cases it is impossible to sense the motions of electrons in the electric circuit. Using only electrical circuits, the counterforce, the essence of working thought remains a mystery.

There is no way to understand how thought works without accepting the human experience on counterforce. In the case of submarine, the counterforce of thought force is expressly strong; it is well perceptible to the brain. In fact, only the existing counterforce and the human reports on its existence make it possible to understand the way thought force woks. What transmit thought force and its counterforce? A new, unknown particle? The existence of an unknown particle is not very likely. If there is no particle, what is it? Some kind of wave? Yes, waves seem to be the appropriate solution. But what kind of waves?

## 4.3 The Paper Wheel Presentation

In this experiment there is a paper wheel that is able to rotate. Its motion is horizontal. During the experiment the wheel was at rest then it started rotating (50 seconds). In the first few seconds we calculated with a uniform acceleration. In the following time the velocity of rotation did not change significantly.

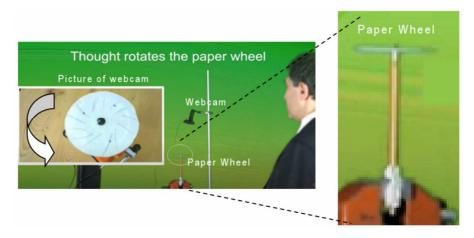


Fig. 4-5. Paper wheel rotated by thought force. More details on this experiment can be found in Ref 11. (Credit © T. Lajtner, Ref 11)

The average thought energy of a seemingly ordinary person can be expressed as  $E_{rot}$ =1.62×10<sup>-11</sup> Joules. It is about such a tiny amount of energy that the Fig. 4-6. shows. A butterfly hardly moves its wings.



Fig. 4-6. A butterfly hardly moves its wings. (Credit Butterfly © T. Lajtner, Thought is Force, 2019)

 $E_{rot}$  is a very small amount, but not small enough. As mentioned above, measurable thought is considered to be the brain's electromagnetic signals. The brain radiates electric waves in a spectrum of 0.01 - 800 Hz (Hz = 1/sec) [12, 13]. These waves are not perfect sine or cosine functions. So, if we use sine functions

to calculate their energy, we will have some error in our calculation. In this case this error is negligible now.

Our brain [14] has about hundred billion ( $10^{11}$ ) neurons. The energy that turns the paper wheel is  $E_{rot}$ =1.62×10<sup>-11</sup> Joules. This energy must be created by neurons. If every neuron of the brain worked exclusively on rotating the paper wheel (which is, of course, impossible), then every neuron should produce a big average energy value and transmit this energy to the wheel. Sending this kind of energy from the brain to the wheel presupposes electromagnetic waves. According to Planck's law displayed in Eq.2.

$$E=h \times f$$
. Eq. 2

Here E is energy, f is the frequency of the particle and h is the Planck constant [15, 16, 17]. Thus, the average frequency of the electromagnetic waves is in the spectrum of microwaves [18]. There is no such a thing as microwave radiation of brain. To go one step further, this wave has to be generated by every neuron for 50 seconds. This is an impossible result. That is the paper wheel cannot be rotated by the electric/electromagnetic signals of brain. Does that mean that the paper wheel cannot be rotated by thought? No, because that is precisely what occurred, the wheel rotated. So what can we conclude? The rotation of a paper wheel is an electromagnetic interaction, too. Thought force is able to generate electromagnetic force and to move real objects.

#### 5 Thought is force

A paper wheel is nothing other than a simple thing that can be rotated by force. Without force, it cannot start rotating at all. It rotates, if force acts upon it. What did we measure using a rotating paper wheel?

The paper wheel reveals thought in its true form. A human being only has to think "Go", so the thought is "Go", and the paper wheel "goes" (i.e. rotates). The computer that analyses the rotation of the paper wheel displays a big "Go". Cf. Fig. 5-1. If humans think "Stop", the thought is "Stop", and the paper wheel "stops". The computer displays the word "Stop". Saying this, the thoughts "Go" and "Stop" are visible. These forces are not the effects of the thought. These forces themselves are thoughts. We measured the thought itself. Thought itself is force.



Fig. 5-1. The computer shows thought "Go". (Credit © T. Lajtner, Ref. 6)

## 5.1 How does the accelerating force of thought come into being?

What is thought force? Let us think of it this way: From a state of rest, the wheel begins rotating, the submarine starts to lift off because the force of acceleration works upon them. According to Newton's Second Law of Motion [19], the force of acceleration F is given in Eq. 3.

$$F=m \times (s/t^2),$$
 Eq. 3

where s represents spatial distance, t time and m mass of the object. Newton's Second Law of Motion makes it possible to understand the force of acceleration and its factors. Let us see the wheel. Force F does not exist if the wheel remains at rest, s=0 and t=0. F comes into existence and rotates the wheel, when s>0 and t>0, that is thought changes time and space. How?

To answer the question Lajtner's Space-Matter Theory will be used. It is not a "standard" physical theory, merely a framework in which some false axioms of academic physics used nowadays have been replaced by new axioms. Space-Matter Theory gives new definitions of time, space and matter.

#### 6 A touch of physics: Wave of Space

## 6.1 Space waves

We know from quantum mechanics that particles of matter are in constant vibration. It is a physical impossibility for matter to come into contact with space

without vibrations having an effect. Based on the Casimir Effect [20] and other physical phenomena we can state that space exists in waves and vibrations.

Can we describe a model of waving space? Yes, by using Lajtner's Space-Matter Theory.

## 6.2 How to picture space waves?

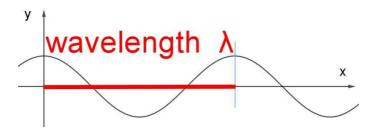


Fig. 6-1. Space wave created by mass.

x and y are spatial distances. The wavelength is the length of one wave period.

Two-dimensional model, not proportional. (Credit © T. Lajtner)

If we calculate with space waves we can use Einstein's idea [21, 22, 23, 24 25, 26, 27] an unusual way. According to his idea, gravity depends not only on mass density, but also on other factors. Newton used in his Law of Gravity the density of mass and no other attributes of mass. Einstein used more than one attributes in his gravity model where gravity is expressed as the curvature of spacetime. According to the general relativity the curvature of spacetime depends on sixteen attributes of matter, including mass density, energy density, energy flux density, pulse current density, impulse current density and various pressures and fluxes.

In Space-Matter Theory there is no spacetime, only space and time. Using these sixteen attributes our unusual way we have sixteen attributes that have modify space and time. In Space-Matter theory every attribute of matter has a print in space as modified space wave,

Therefore is possible to calculate with more than one space wave or just with their sum, but here only the space wave created by mass density is showed in Fig. 6-1., because it is the simplest model.

If an observer is able to measure the wavelengths of a space wave, he would find the *shortest* wavelengths of space waves if mass is at rest—that is, mass does not move in the given inertial frame of reference. An inertial frame of reference is

where there is no acceleration. The motion of an inertial frame of reference has constant velocity in a straight line. If we stand motionless, we are moving at constant zero velocity. According to modern physics, only object with mass can have inertial frame of reference [28].

If mass moves in the given inertial frame of reference (or with the whole inertial frame of reference), the wavelength of space wave made by moving mass is longer. ("Faster or bigger masses create longer wavelengths.")

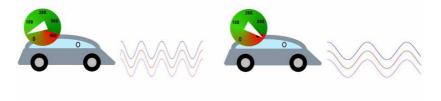


Fig. 6-2. The space waves are longer if the object is faster. Model not proportional. (Credit © T. Lajtner, Lajtner Ref. 28)

### 6.3 Space waves are connections between masses (matter)

Space waves are connections between masses (matter). This is why gravity exists between masses. Among bodies experiencing gravity, the wavelength of Space waves increases. That is the Space "pressure" between the bodies decreases. The big (orange) mass in Fig. 6-3. makes the wavelength of Space waves longer on the left side of the small (blue) mass. On the other side of the small mass, the wavelength of Space waves is shorter. The shorter wavelength means greater frequency, e.g. more hits from right than from left. The difference between the densities of the hits (i.e. forces) moves the mass forward. If the small mass starts to move, it will increase the wavelengths of Space wave between the masses. The mass will accelerate. The wavelengths will be longer, see Fig. 6-2. The small object accelerates further... That is why there is gravitational acceleration.

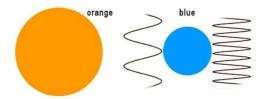


Fig. 6-3. Gravity caused by Space waves.
Gravitation occurs when space shifts. Model not proportional [29].
(Credit CC BY-NC-SA 4.0 T. Lajtner, Lajtner.com)

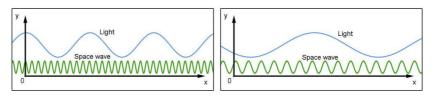
The Space wave (set of Space waves) between the two objects can be seen as a communication channel. Space waves make possible that both objects detect all movements of the other object, i.e. every action creates reaction. This is a system with feedback.

#### 6.4 Why is the speed of light constant?

This is a simple question, but physics has not answered at yet. Instead of an answer there is a law: the speed of light c is constant in vacuum. c = 299,792,458 m/s.

But how can the speed of light be constant from the viewpoint of masses in every (inertial) frame of reference?

The speed of light can only be constant if light is in the given frame of reference. How can it be? It can happen by using space waves created by the inertial frame of reference. According to Space-Matter Theory space waves are part of the frames of reference. Light travels on Space wave created by mass. Light does not change the wavelengths of space waves. Light uses space waves as reference waves. Longer space wave causes longer light wave in the case of the same light. See Fig. 6-4. Bigger gravity means longer wavelengths of space waves. It causes the gravitational red shift of light.



**Fig. 6-4. Space wave and light wave at several velocities of mass.** The gravity is bigger in the second picture. x and y are spatial coordinates. Model, not proportional. (Credit CC BY–NC–SA 4.0 T. Lajtner, Lajtner.com)

Light travels on Space waves generated by mass. Space is written in capital S means space that masses change. We know light does not create gravity in our Space, that is light does not change the wavelength of Space waves. But matter has a copy in space, light is matter, it must have a copy in its space. Saying this, light has gravity in a different space not in the Space of masses. The space of light, i.e. Space wave generated by mass is part of the frame of reference of mass, it is "glued" to the mass, that is the mass and the space of light are in one inertial frame of reference independent of the velocity of mass, i.e. independent of the wave-

lengths of Space waves. In this inertial frame of reference the velocity of light is constant c.

According to the above-mentioned, there are several spaces. Mass has its Space and light has its space and they are different. Saying this, the definition of space is not self-evident. What is space? What is time?

#### 6.5 Space-matter model: Spatial distances given by space waves

Can we measure space? Measuring space, we measure matter. The meter is the length of the path traveled by light in vacuum during a time interval of 1/c = 1/299,792,458 of a second [30].

If we measure space by means of light, we use a kind of matter that has its own nature. We cannot measure space at all. We measure only matter. We can "see" the length of space through light's glasses.

#### 6.6 Wavelength and spatial distance

Seeing the Fig. 6-5. below we remember the length contraction of special relativity. Yes, this part is about it, but here length contraction is explained in a different way.

The given spatial distances of the object and of the observer can be given as the sums of the wavelengths of space waves. If the object moves in relation to the observer, because they are in different inertial systems, then the observer and object will realize different space wavelengths. Longer wavelengths mean higher speed. Different speeds mean different lengths of wavelengths of space waves.

The same spatial distance measured from Object A to Object Circle can be made out of different wavelength of space wave according to different observers [31].



The length contraction described in special relativity is a length dilation of the wavelength of the space wave. "A" imagines the distance of "B" this way:



Fig. 6-5. How does spatial distance change? Model, not proportional- (Credit CC0 T. Lajtner, Lajtner.com)

"R" is the way how relativity presents the distance of "B" as length contraction. In reality solution "B" exists, because the wavelengths of space waves grow.

The change of wavelength is a real phenomenon in space, not the viewpoint of the observer, as the special relativity states. Behind the relativistic length contraction of spatial distance is a real difference of the space's wavelengths of observer and object, says the Space-Matter Theory.

## 6.7 Time given by space waves

What is time? Today's physicists claim that time is what we measure as time. What does the phrase "what we measure" mean? We can measure only matter.

One second is defined as a changing character of the cesium 133 atom [32] we can measure. If we measure time by means of mass, we use a kind of matter that has its own nature. We cannot measure time at all. We measure only matter. We can "see" time through the glasses of mass.

One second has its start and has its end that we measure. The main element of time is the change. If there is no change, there is no time. We measure changes of matter measuring time.

According to Space-Matter Theory, time exists without having been measured.

### 6.8 Time as spatial waves

In Space-Matter model, time comes into existence when matter and space meet. Also, whenever matter and space meet, the result is time. Time is the actionreaction phenomenon of matter and space, and appears as a spatial wave.

There is no way putting space and matter together without action and reaction coming into being. Or in other words, there is no way putting space and matter together without time coming into being. See Fig.6-6.



Fig. 6-6. Lajtner-burger.
3D space + 3D matter = 3D space + 3D matter + Time.
(Credit CC BY-NC-SA 4.0 T. Lajtner, Lajtner.com)

Time depends on two things: on the given space and on the given matter that travels in space. According to modern physics, only mass has time. Saying this, our time is the action-reaction of mass and Space that exists as Space waves.

Wave of Space is not the only space wave, i.e. not the only time, it is just our time. In our life (and in physics models) we use the time created by mass, but "non-mass" objects may use different space waves as time. Photons create their own time, although physics states that a photon has no time. As mentioned above, it is impossible, since photon is matter that causes changes in its space.

#### 6.9 Our time wave and time unit

The actions between Space and mass, from the viewpoint of mass, can change between strong and weak. It oscillates. The change is periodic, and one period is one unit of time. This unit of time has two parts:

- a) the hit, when Space acts upon mass most strongly;
- b) the period between hits when the force of Space acts less strongly upon mass.

If we employ a cosine function to describe time, we get a periodic wavelength. Hence, it appears to be a good model: where a) equals the positive ampli-

tude of the cosine function, and every other value of the function is b). In a unit of time (in a single time wave), there is only one positive amplitude. Time is a repetition of these units. Time is the continuous alternation between a) and b). From the viewpoint of matter, time is characteristic of the periodic way that Space acts upon mass.

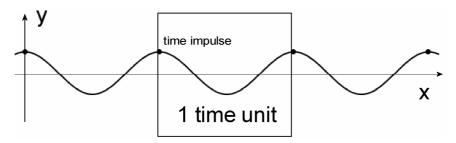


Fig. 6-7. Time as Space wave. x and y are spatial distances. Model, not proportional. (Credit CC BY–NC–SA 4.0 T. Lajtner, Lajtner.com)

In the Fig. 6-7. a pulse of time marked as point. This is followed by a lack of time pulse:

pulse pulse pulse ...

The longer the wavelength of the Space wave, the rarer the time impulse:

pulse pulse pulse ...

Saying these, we can understand why the paper wheel is rotated by thought force. Thought force changes the wavelength of Space wave i.e. time and Space are changed. The paper wheel will rotate. What else can we conclude from this? We can conclude if the wavelength of Space wave grows, mass accelerates.

Solely through the use of Space waves, we can express spatial distance, time and energy. Space waves are not only indicators of these phenomena like e.g. light indicates the longer space waves. Spatial distance and time are given by Space waves.

## 7 Is the velocity of the mass always constant?

## 7.1 Velocity of space waves is constant

If time waves are derived from space waves generated by mass, there arises a strange phenomenon—time and distance are the two sides of the same coin from the viewpoint of mass. Saying this, it is impossible for an object with mass to change any spatial distance without changing time, and changing time means changing the position in the given space.

## 7.2 Space unit and time unit given by the same spatial wave

Now we can use the idea of Minkowski geometry in Fig. 7-1. to make the new time and distance model visible. In the following coordinate systems both time t and distance s are expressed in meters. We can realize that the velocity of mass according to Space waves is always 1, because distance  $\Delta t$  is always as long as  $\Delta s$ . The wavelength of Space wave always defines 1 unit of time t and 1 unit of spatial distance s.

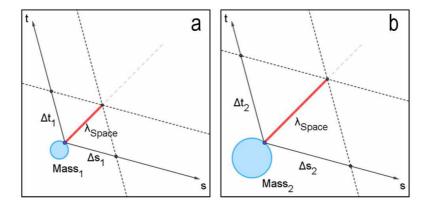


Fig. 7-1. Wavelength of space wave λ depend on the velocity of mass. Fig. 7-1.a. and Fig. 7-1.b. show the same mass at different velocities. (Credit © T. Lajtner, Ref. 28)

Bigger velocity makes the wavelength of Space wave longer. The wavelength of Space wave creates the unit of time and spatial distance for the given mass. The velocity of an object with mass changes the length of wavelength of the Space wave but not its velocity. The growing length of units does not destroy the proportion of the units. Eq. 4. shows that the velocity of mass is constant in its Space from the viewpoint of Space wave and mass, too.

$$v_{\text{Mass in Space}} = \Delta s_1 / \Delta t_1 = \Delta s_2 / \Delta t_2 = 1$$
 Eq. 4

Fig. 7-1. explains how space and matter create and change time. An object gets moved in Space. This is the action. The reaction of Space is the change of wavelength of the Space wave. Time is created and changed. This is how electromagnetic force works. First, the electromagnetic force acts. The object moves, the wavelength of Space waves changes.

In the case of thought force, the situation is reversed.

There is also a third situation. Let us study the accelerating Universe! Why does the Universe accelerate? Mass in Space will accelerate once it started moving. It will accelerate unless acted upon by a force created by matter i.e. without additional energy, without other mass and without gravity. The changing wavelength of Space wave has an action on mass. This is followed by a reaction of the object. It moves faster. This is followed by a reaction of Space—the wavelength of Space wave grows, therefore mass goes faster, therefore the wavelength of Space wave grows...

As we can see there is an important interaction between matter and space. Let us call it Force I (pronunciation: force the first).

Knowing the interaction between mass and space, Newton's First Law of Motion is arguable. Today's academic physics accepts Newton's First Law as fact. This is not a fact, it is actually Galileo's 400 year old opinion. It is disputable [33]. (Moreover, the inertial frame of reference also needs a new definition, because of the existence of Space waves.)

#### 8 Force I

Force I is the interaction between matter and waving space. Force I permanently exists as long as there is matter in space. According to Eq.3., this force appears as changes of time and spatial distance, therefore Eq. 3. works, and the paper wheel rotates. That is, Force I is able to create the electromagnetic interaction. The electromagnetic force and the weak nuclear force have common roots. They are called electroweak interaction [34]. The asymptotic freedom [35, 36] makes it possible to join the electroweak and the strong interactions at high energies. So

these three interactions can be seen as one interaction. Force I creates electromagnetic force, therefore it also creates these three interactions (see Ref. 1).

Gravity is created by Force I. It is described above.

Summarizing the above-mentioned, Force I generates every known fundamental interaction. Fig. 8-1. shows it an artistic way.





Fig. 8-1. Four fundamental forces we know and the hidden Force I. Force I is the only and ultimate force that appears as fundamental interactions.

(Credit © T. Lajtner, Ref. 28)

## 9 Light and particles are able to travel faster than c

Mass travels in its Space the same way how light travels in light's space i.e. with velocity c. These spaces are different. What if they travel in the same space? Each will travel here as fast wave i.e. faster than light. In which space can both travel so fast? In a fast space made of matter.

Here there will be presented a space made of matter. But what is matter and what is space? The simplest definition of them is the following:

Space is what matter uses as space. Matter is what space allows existing as matter in the given space.

In some cases space can be made of an object that we know as matter (short: matter-space), e.g. via tunneling a barrier is an object with mass and it acts as a matter-space.

The given space determines the form of the appearance of matter, e.g. electrons can be particles with mass in Space but they cannot be massless fast waves in Space. On the other hand, they can be massless fast waves via tunneling in matter-space, but they cannot be particle with mass in matter-space.

## 9.1 Tunneling: space made of matter (fast space)

Quantum tunneling refers to the quantum mechanical phenomenon where a particle (with or without mass) tunnels through a barrier that it normally could not

surmount.

In experiments there are many particles sent to the barrier, and only part of them get through the barrier. They are the tunneling particles. In tunneling group velocity is important, but if we examine the tunneling effect as the behavior of a given particle, we can analyze *this* single particle i.e. *its* velocity. In the forthcoming parts of this study, I analyze the behavior of a "single" tunneling particle, because I want to point out the metamorphosis of this particle, which is a common attribute of particles.

Particles travel with superluminal (faster than light) velocities in tunneling, therefore they will be called fast waves in the forthcoming parts of this study.

Nimtz [37], Enders and Spieker first measured superluminal tunneling velocity with microwaves in 1992. The tunneling particle has an undetectable condition. Tunneling takes time, which can be measured.

In Nimtz's experiments tunneling particle are photons and electrons. Every electron has mass. There comes the big riddle in tunneling. Experiments show [38] that tunneling particles i.e. electrons are faster than light, and these facts are *not* compatible with the mainstream physics theories and with the special relativity. E.g. according to the theory of relativity the growing velocity of particles with a mass (e.g. an electron) causes growing mass, and if  $v\rightarrow c$ , then mass  $m\rightarrow \infty$ . Since the mass m (of the electron) is never  $\infty$ , and the tunneling is fact, we have to suppose that v=c never occurs from our point of view. There is a discrete jump at velocities of electron, and v< c becomes v>c without v=c. The particle with velocity v>c on its own is immeasurable as yet.

The barrier is a space made of matter. It will be mentioned as fast space in the following, where v>c from our viewpoint. In Table 9-1. the traveling particles are photons (light) that have no mass. Note electrons with mass are also able to turn into fast waves. Fast waves are massless. (The existence of the mass of matter seems to depend on the given space where matter travels.)

## 9.2 Superluminal velocities of light via tunneling

Topic	Experiment 1	Experiment 2	Experiment 3	Note
$v_{fw}/c=$ $=v_{tunneling}/c$	4.702	8.559	2.565	superluminal velocities
$f_0$	8.7·10 <sup>9</sup>	9.97·10 <sup>9</sup>	8.7·10 <sup>9</sup>	frequency of particle before tunneling (1/sec)
$\lambda_0$	$3.45 \cdot 10^{-2}$	$3.01 \cdot 10^{-2}$	$3.45 \cdot 10^{-2}$	wavelength of particle before tunneling (m)
L	$1.142 \cdot 10^{-1}$	$3.00 \cdot 10^{-1}$	$1.00 \cdot 10^{-1}$	length of the barrier (m)
$h_{ m kinetic}/h_{ m rest}$	22.11	73.15	6.58	motion indi- cator calculat- ed by Dr. Lajtner

 $\label{eq:controller} Table~9-1.~The tunneling~velocities~v_{fw} \\$  and the lengths of barriers in three experiments of Nimtz.

In barriers [39, 40, 41] i.e. in fast spaces matter particles travel at superluminal velocities:  $v_{\rm fw}$ >c. In these cases the motion indicator calculated by Lajtner is greater than 1.

## 10 A touch of physics of thought force

## 10.1 How is the "big" magnitude of thought force created?

Thought force is able to rotate a "heavy" paper wheel. How can be thought force so strong?

Let us use Table 1. Now we can study the same particle in two different spaces. Using Space-Matter Theory, after some calculation not published here, it seems that there are two parts of the well-known Planck constant h. h is the must important unit in quantum mechanics, it is the unit action. Supposing that the energy of the particle does not change via the tunneling, we can state the following.

*h* has two parts that work together. They depend on the velocity of particle (wave, fast wave). Look at Eq. 6. and 7.

$$h_{rest} = (c/v_{fw}) \times h$$
 Eq. 6.

is the rest energy part and

$$h_{\text{kinetic}} = (v_{\text{fw}}/c) \times h$$
 Eq. 7.

is the kinetic energy part of the Planck constant h—in the case of light and seen from our Space. The motion indicator  $h_{kinetic}/h_{rest}$  is made of the two parts of h.

Physics has defined neither Eq. 6. nor Eq. 7. previously. If  $h_{rest} = h_{kinetic}$ , then the speed of the light is c; Planck's law remains untouched if  $v_{fw} = c$  and the motion indicator is 1. If  $h_{rest} = h_{kinetic}$ , then we speak about a "normal" photon that travels with c velocity.

If  $h_{rest}$ > $h_{kinetic}$ , we are speaking about particles with mass i.e. fermions, where the motion indicator is less than 1. If  $h_{rest}$ < $h_{kinetic}$  we are speaking about fast waves. Both photons and fermions (e.g. electrons) can realize the tunneling process. We cannot measure their fast waves via tunneling as yet, and we cannot measure either  $h_{rest}$  or  $h_{kinetic}$ .

According to Space-Matter Theory  $h_{rest}$  and  $h_{kinetic}$  depends on the velocity of particle. Saying this, it seems to be a good idea to create an electron in a fast space. To create a particle in a fast space needs only a small  $h_{rest}$ , because the big  $h_{kinetic}$  comes from itself. If the particle leaves the fast space its  $h_{rest}$  grows, while its whole energy remains untouched. The thought force can be generated this way; therefore it can be as strong as the measured values show. This strong thought force will be placed in Space waves and appears as a modified Space wave.

#### 10.2 Thought's feedback mechanism

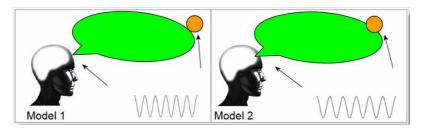


Fig. 10-1. Your thought leaves your head, but it does not lose the connection with you.

It gives feedback for you. Illustration.(Credit © Lajtner, Lajtner.com, Ref. 6)

In Model 1 and in Model 2 of Fig. 10-1. thoughts express force on the small object. Model 1 shows the phenomenon without feedback: no thought force com-

munication. The wavelength of space wave is unchanged. The thought force communication works in the case of Model 2, where thought force gives a feedback. The wavelength of space wave is changed. The paper wheel and the submarine experiments prove that Model 2 is correct.

As mentioned earlier the working method of thought force presented in Fig. 10-1. and in Fig. 10-2. cannot be derived from theoretical consideration. It needs experiments and praxis to realize the two-way communication via thought force. This two-way communication via thought force is a new discovery.

Now, let us understand the situation shown by Model 2 using the terms of physics. The common picture of a force in physics is a vector. Thought force is a "normal" force that has direction and magnitude with respect to a frame of reference. Thought force (green) can also be displayed as vector.

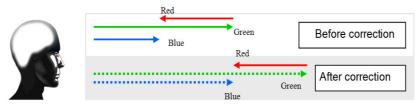


Fig. 10-2. Forces of thoughts.

The first part of this figure (with white background) shows that two forces meet. The green one is thought force, the red one is an external force. The resultant of these forces is the blue arrow. To restore the original effect of thought force in order to archive that we intended we need to generate a new, longer (green dotted) thought vector. Here the blue dotted vector is as long as the first green vector of thought was. Illustration, not proportional. (Credit © T. Lajtner, Ref. 6)

Your thought leaves your brain, but it does not lose connection with your brain. The changes of thought appear as feedback your brain perceives. Your brain can sense that the green thought has changed. It tries to restore the green thought to create its intended form.

By stating this, we claim thinking is a continual interaction, seeking the balance between thought force and other forces. In terms of physics, our thought force (green) is a force like any other force. If it meets another force (red), they create the resultant forces (blue).

The second, gray part shows your brain activity at work, for example, rotating the paper wheel. Your brain can sense the blue resultant force and your brain tries to increase the (green dotted) force of thought as long as the new sum of forces (blue dotted) can replace the intended green thought force. Now the blue dotted force will give you the result you wanted e.g. it rotates the paper wheel.

You get the result you want, only if you change the force of your thought depending on environmental forces. The method is generally known as a system with feedback [42]. Of course, there is a limit to increase your thought force. Force of thought has upper lower limits. The limits of your thought force can be greater or smaller than his/her limits, but we both have a very small range of

thought force comparing the forces of the Universe. But within this range you are able to grow or decrease the force you want to send via thought. In plain English, you can change the length and the direction of your thought force arrow. This is your inborn ability. You use it, making unconscious thought force communication possible anytime and anywhere. This study shows you that you can also do it consciously.

#### 10.3 Thought force exists as Force I

The feedback mechanism results from the way thought force travels. How does thought force travel? Thought force is embedded in Space waves. Thought force is a modification in the wavelength of Space waves. See Fig. 10-3.

Thought force creates electromagnetic force by changing time and space. Because thought force is not a known fundamental interaction, it must be a new interaction that is able to create electromagnetic force and able to create feedback. Force I is a phenomenon like this, i.e. thought force exists as Force I.

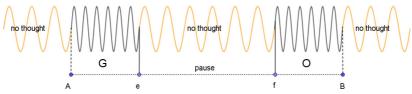


Fig. 10-3. Thought force "GO" embedded in time wave. Model, not proportional. (Credit © T. Lajtner, Ref. 6)

#### 11 Thought in world, world in thought

Force I can be created by many objects. Therefore, our thought force can be influenced by many events we do not know at all.

## 11.1 Three paradoxes of thought

Your every thought has force, that is, your every thought is action that generates reaction. If force reaches your brain from the world as action, your thought or the change of your thought is the reaction. Thinking is a continuous action-reaction process, because each thought of yours has two parts.

 $\begin{array}{c} Thought_{Intended} & (you \ want \ to \ think \ this \ thought) \\ + Thought_{World} & (force \ given \ by \ the \ world \ can \ be \ sensed \ as \ thought) \\ \hline = Thought_{Result} & (the \ result \ of \ each \ thought \ force) \\ \end{array}$ 

Your intention as force and the force of the world form a resultant force Thought<sub>Result</sub>, this is not the intended thought, it is a third thought. Thought<sub>Result</sub>  $\neq$  Thought<sub>Intended</sub>. Fig. 11-1. helps to understand the concept.



Fig. 11-1. Thought<sub>Result</sub> ≠ Thought<sub>Intended</sub> (Credit © Lajtner, Lajtner.com)

If you want to think your intention, you have to correct the impact of the force of the world. If you want to think Thought<sub>Intended</sub>, you should think Thought<sub>Intended</sub> and Thought<sub>Correction</sub>, where (Thought<sub>Correction</sub>+Thought<sub>World</sub>=0).

 $Thought_{Intended} \\ + Thought_{Correction} \\ + Thought_{World} \\ \hline \\ = Thought_{Result}$ 

In this case: Thought<sub>Result</sub> = Thought<sub>Intended</sub>. Fig. 11-2. visualizes the process.

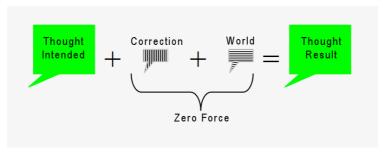


Fig. 11-2. Thought<sub>Result</sub> = Thought<sub>Intended</sub> (Credit © Lajtner, Lajtner.com)

Thought<sub>Correction</sub> is part of your thought that keeps changing. It is neutralizing Thought<sub>World</sub> i.e. the thought force of the world. The world changes uninterruptedly, therefore Thought<sub>Correction</sub> also keeps changing. If you want to think Thought<sub>Intended</sub>, you have to keep adjusting to the force of the world. In plain English, you should always change your thoughts, if you want to think the same thought:

#### 1. Your thoughts change even when they do not change.

The world is changing, Thought $_{World\ yesterday}$  was yesterday, today Thought $_{World\ today}$  exists, and they are different. They must be different, since the world is changing. If you want to think the same Thought $_{Intended}$  you thought yesterday you have to think

$$\begin{split} Thought_{Intended} + Thought_{Correction\,today} & instead \ of \\ Thought_{Intended} + Thought_{Correction\,yesterday}. \end{split}$$

# 2. If you are thinking today what you thought yesterday, you are already thinking something else.

If the world is always changing, what is the stable point for you? The only stable point for you is your DNA. You can compare your thoughts to your DNA. If the connection between your DNA and your thoughts of yesterday and today are the same, you are thinking the same thing you thought yesterday—according to your DNA but not according to the world. What does the world require?

#### 3. In order to remain in one place you should run.

I gave the third paradox in a general form, because it seems to be true everywhere. Here is an everyday example: If you have had the same standard of life as those in your surroundings and you want to keep pace with them, you will need to work harder.

And here is a cosmic example: Our Earth is traveling about at an average orbital speed of 828 thousand km/h (514 thousand mph) around the center of the Milky Way [43] in order to remain in the Solar System. It follows the Sun that is traveling this way.

## 11.2 The main paradox of thought

1. Thought force has a very big velocity. This result comes from its physics, which is not detailed here because of its length.

2. There are many forces in the world that are in the size range of thought force. The forces act as vectors. If similar forces meet each other, they will be added up, they will have one resultant force.

Thinking seems to be a lonely activity, but it is not. It is just the opposite. You need the entire world to think.

# The whole world is in your thoughts, and your thoughts are in the whole world.

Thought as force does not require further search for additional "ancestors" and additional causes. The cause of thought is the world and the forces within it.

#### 11.3 Our First Thought

What is the first thought of a human being? Everything starts with this first thought. How was this first thought born? If we understand this, we understand how other thoughts were created.

It is supposed we all must have a "Personal Data Bank" (PDB) Ref. 4. somewhere stored in our body and/or in our brain and/or in Space. It will be always called upon if we see, hear or sense something, if an input reaches us. For example, if you see a paper wheel, your personal data bank will offer a lot of choices what to do with this paper wheel. a) Swallow it. b) Lacerate it. c) Ignore it. d) Rotate it with finger. e) Rotate it by thoughts. Your PDB contains the choices and you can choose one.

Our PDB can essentially have information from our personal experiences, memories and our knowledge sources. This kind of information originates from us.

There are thoughts that do not originate from us, and yet they can also be stored in our PDB. So what is my first thought when I see the paper wheel? It is what I choose from the possibilities generated by the paper wheel as input. This data bank can be in our brain, and it can be stored partly in our body, or in space.

A very small embryo has a body and causes changes in space waves, but it has neither brain nor head. But we already get thought forces. And because of the action-reaction, we also send thought force as an embryo. There are experiments that show that an adult has something of the embryo time that is unconscious and you can call it memories. There are many experiments that show that the 30-week-old embryo already has "measurable" memories <sup>44</sup>.

It is possible to go further, because we had thoughts earlier already. What was our first thought? It was the very first action-reaction we had. What was the only answer we could give back then? That was: "I am!" We were aware of that right away.

"I am!", this is our first thought, and we have to keep to this status. The first law of nature that comes with our first thought is: Stay alive!

#### 12 Conclusion

- Thought is force. This force is different from the four known fundamental interactions. It is an unknown fundamental interaction.
- Like all forces, thought force also creates its own counterforce. There is no way to understand how thought works without accepting the human experience on counterforce. If we accept the existence of thought force and its counterforce we need a new physics theory. Space-Matter Theory is able to describe this new fundamental interaction.
- Every particle is vibrating. The vibration has a reaction in Space. Space waves. Space waves connect objects existing in Space. Note these waves are not the gravitational waves measured by LIGO<sup>45</sup>.
- Thought force and its counterforce are phenomena that are embedded in the modified wavelengths of Space waves. Space wave makes possible a two-way communication. We can create, send and receive thoughts.
- Thought force and its counterforce have a given frequency spectrum within Space waves. There are also other forces in this spectrum. Brain senses forces in this spectrum as thoughts regardless the sources of forces. Saying this, there are thoughts that no brain, and even non-living things created. But they have been created. Somewhere. Everywhere. Continuously.
- Thought force is a fundamental and universal way of communication in our Universe.

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