

Time-Asymmetric Space, Geometric Intelligence and Morphic Resonance

Research Laboratory for Vacuum Energy
Marcus Reid
July 2010

Marcus Reid wants to thank Dr. Thomas Bearden and Prof. Rupert Sheldrake for the
friendly and helpful advice

Introduction

Using the Maxwellian equations the electromagnetic field is described as a phenomenon which is decoupled from the energy inherent in space-time or the quantum vacuum. That is the reason why the electromagnetic field converts the electric energy directly from the input to the output. In a simple electric motor for example the electric input energy is converted directly into mechanical output energy. In this case the reason for the conservation of energy is easily explained. What enters at the entrance comes out at the exit and in an ideal system the input energy corresponds to the output energy.

From the point of view of the quantum field theory not only the electromagnetic field but all force fields are phenomena that are connected to the energy which is contained in space-time. In case of the electromagnetic interaction the virtual photon is the agent and causative creator of that interaction. Virtual photons appear just like that out of empty space-time and after a very short time they disappear again into that domain. If a virtual photon appears directly at or within an electric source charge, then the virtual photon can transfer its energy to that electric source charge and create a force. That also means that the energy for example within an electric motor system is not transmitted directly but in an indirect way. The input energy will be transferred to space-time at the air gap between the electromagnet and permanent magnet and will then be initially lost in an observable sense. That energy now exists in a potential form (information form). Afterwards, the electromagnetic potential flow will spread into space-time at the speed of light. The electromagnetic potential flow is like a virtual energy flow. As soon as the potential flow reaches the permanent magnet at the other side of the air gap, then the potential flow will help to integrate energy from local space-time directly at and within the permanent magnet. This virtual „space-time“ energy, which now accelerates the permanent magnet and is thereby converted into an observable mechanical form of energy, arises from that volume of space-time which is occupied by the permanent magnet. That is why the input energy has basically nothing to do with the output energy. The electric input energy is not the cause of the output energy but only the initiator, which has activated or asymmetrized the quantum vacuum at the place where the electromagnet is. That is all. The dissemination of the potential flow in space and the energy generation at an accelerating charge are effects of space-time.

If the energy conversion process in an electromagnetic system is explained using this view, then several basic questions arise and the reason for the conservation of energy must be explained in a completely new way. A typical source charge for example radiates its potential flow just like that in a permanent way into its environment. The source charge does that without the induction of an observable energy input. Since with this potential flow observable energy can be generated the following question arises: why are the observable energies conserved despite the fact, that the potential flows are not conserved? The answer to that question and how the energy conversion process in an electromagnetic system works is explained in the film „Symmetric electric systems and the interaction with the quantum vacuum“.

See: www.vakuumentnergie.de

Since the electromagnetic interaction as well as all other interactions exists only in time, the motivation has arisen to create a model which shows that all interactions are a function of time. If time would stand still, no motion and no acceleration could exist and not even an observation would be possible. Since every imaginable process only exists in time then, from the view of the author, every interaction must be a function of time.

„Without thinking deeply about time, physicists may never make progress on a unified theory.“ (Professor Craig Callender, Scientific American, June 2010)

Time - Asymmetric Space

The American physicist Dr. Thomas Bearden suggests that the virtual photons, which appear just like that from seemingly empty space and permanently interact with a charge, are like a time generator that generates time at a charge. Thus space-time contains time energy, which is mediated by virtual photons.

This process can be better visualized when the atom itself is seen as a phenomenon which consists merely of virtual photons. From the view of the author the electron for example consists merely of virtual photons which appear locally* from space-time. The charges of the virtual photons are oriented (polarized) in a recursive (toroidal) way from one virtual photon to the neighboring virtual photon. The electron would then look like a donut, which consists of an orientation process of virtual photons. The electron can be seen as a recursive manifestation of space-time.

(Professor Roger Penrose, Twistor theory, Scientific American, June 2010)

** A „local“ appearance means, that the appearance of the virtual photons is connected to a so called frame. The frame is like a matrix which exists in space-time. This space-time matrix can also be moved under certain circumstances (rotating superconductors).*

See: „Frame Dragging“

*„A rotating mass is expected to twist space-time – but not by this much“
(New Scientist, November 2006)*

The electromagnetic field exists in space as a broken symmetry of space-time. A broken symmetry includes a permanent potential flow. The potential flow is expressed by the steady orientation of permanently newly appearing virtual photons. If a region in the area of interaction of an electron is observed, then some of the virtual photons become oriented. When another electric charge is placed into that area of interaction, then some of the virtual photons will now interact in a special way. Some of the virtual photons will be integrated in a directed or in an asymmetric way. This asymmetric integration of time energy is the cause for the creation of a force and acceleration (observable energy).

Should the virtual photons be responsible for the time flow, then one could say, that an electron makes the surrounding space-time time-asymmetric. The electromagnetic aspect of space-time or of the quantum vacuum becomes time-asymmetric.

Time → Force → Energy

Let's imagine a region of empty space-time where only two electrons are positioned next to each other. We will firstly only look at the potential flow, which is radiated from the electron placed on the left side. This electron makes the electromagnetic layer of space-time time-asymmetric. Since the electron on the right is positioned in the area of interaction of the left electron a repelling force appears. This force appears because the electromagnetic time flow aspect at and within the right electron is integrated asymmetrically. The same effect is of course also existing at the other electron.

In a region of empty space-time where there are no source charges and fields, the quantum fluctuations will appear in a completely evenly distributed way. (The author has identified this condition as virtual entropy). If in this region of space-time only one electron is present, then the virtual particles will be integrated into that electron in a uniform - chaotic way. That means that the time flow within the electron will pass in a normal way and no force is created in a specific direction if certain quantum fluctuations are ignored. Sometimes there is a short coincidental coherence of a few quantum fluctuations (virtual particle pairs). That means that the orientation of the charges of these virtual particle pairs shows the same direction. If a few of these directed virtual particle pairs appear directly at or within a source charge, then they can give the source charge a small push.

See: Zitterbewegung

As soon as another electron is present as mentioned above, then some of the virtual photons will be integrated into that electron in a non uniform way and less chaotic. (The author has identified this condition as virtual negentropy). A part of the time energy is not integrated anymore in a balanced way. The stronger the electric force becomes, the less effective the time energy will be integrated to generate the flow of time. The more virtual photons are used to create a force the less virtual photons are at disposal which can generate the time flow.

This mechanism can also be transferred to the other interactions. That also means, that at higher forces and accelerations the electromagnetic time flow aspect will become slower and slower. Probably that is the reason why at higher accelerations of atoms the time flow within these atoms decreases.

See: Time Dilation

As soon as an electron is accelerated, then the electric time flow aspect of space-time will be converted into an observable form of energy. If this view is transferred to the other interactions, then an additional possibility arises to give a definition of what energy is.

Energy (still in potential form) is the broken symmetry of space-time which exists between two or more source charges. The broken symmetries which emerge from the source charges are phenomena of the quantum vacuum or space-time. The broken symmetries represent a potential to integrate the time energy which is present in space-time in a directed way. The directed or asymmetric integration of time energy at a source charge creates a force. When a broken symmetry is shifted in space-time (which also means that the attached source charge is displaced) then the observable energy characteristic of the time flow or potential flow becomes visible. When the asymmetries in space get shifted they are only moved, stretched or compressed. That is the reason why the asymmetries are conserved. Asymmetry conversion is the process which we perceive as observable energy. After an asymmetry conversion process the asymmetries as well as the associated source charges exist in a more negentropic¹ form (more ordered or more symmetric) or they have dissolved².

¹ When the source charges and their attached asymmetries exist after a common energy conversion process in a more negentropic form, then that means that the geometric structure of the source charges has further symmetrized. During this symmetrizing process heat is radiated into the environment and/or mechanical work is done. During the symmetrizing process the geometric structure of the source charges will take a more „comfortable“ position and that is why they cannot generate as much work as before. The geometric structure will symmetrize until they are positioned in a perfect symmetrical arrangement. A system where the source charges are arranged in a perfect symmetrical way is not able to generate any work. If work shall be done, a broken symmetry (entropy) between the source charges and their asymmetries is necessary.

² If during a work process a source charge is dissolved into heat, then the attached asymmetry will also vanish. In that moment when the source charges get dissolved the permanent orientation process of the virtual photons stops as well. Thereby the steady (virtual) negentropisation of space-time stops. The potential flow, which was radiated from the source charge, when the source charge was still in existence, spreads into space and gets scattered. Now space-time moves into a more entropic condition.

If in connection, for example with an asymmetric electromagnetic system excessive observable energy is extracted from space-time, then the source charges and their attached asymmetries are firstly conserved, too. The source charges will only be placed into a more entropic (unordered or asymmetric) position. This geometry-asymmetric positioning represents a potential to create work. Heat is generated and/or mechanical work is carried out.

If in connection, for example with an asymmetric electromagnetic system excessive observable energy is extracted from space-time and that energy is converted into a new source charge then a new radiating source is created. Right after the creation of such a new source charge the newly created broken symmetry will spread into space-time with the speed of light. This process can be compared with an electromagnet, which is just being supplied with energy. Its magnetic field (asymmetry) will also spread at the speed of light into space. Space-time is thereby changing into a less entropic condition. That means that some of the virtual photons in the field of interaction of the source charge are not oriented anymore in a random way, they are now directed into the direction of the source charge (virtual negentropy). This negentropisation of space-time from a source charge is perpetual.

Dissimilar Time Flows

The explanation of the reason for the generation of a force and energy to a time flow, leads to the possibility to assign for every force an independent time flow. From the view of the author it would be useful to consider an electric time flow as the primary energy deliverer for the electromagnetic interaction and a gravitational time flow for the cause of the gravitational force and so on. According to that view, there are four different time flows. These time flows exist as different layers of space-time. Possibly space-time contains multiple time flow levels and today we are only aware of four of them.

Should this view be useful, then it would make sense to consider the first dimension as a time dimension which is divided into the respective time flow levels and a second, third and fourth dimension would refer to the space dimensions.

Geometric Intelligence

In the human body there are exceedingly many atoms, molecules and cells. The electromagnetic fields, which are radiated from these atoms, play a fundamental role in all chemical reactions and bonds. So there are numerous potential flows, which radiate from the atoms and molecules. To make any kind of movement between the molecules possible, it is a precondition that the geometric structure of the source charges and their associated asymmetries are arranged in an asymmetric-enough way. To keep this geometric arrangement asymmetric enough, the body needs access to an external source of energy such as food. These external energy sources represent a broken symmetry, which is used to asymmetricize the geometric molecular arrangements within the body. So these asymmetries, which exist between the molecules, are the motor for life. The energy, which gives the spark of life, in the first place is therefore the time energy that is contained in space-time.

Since all chemical reactions are based upon displacing, stretching and compressing the broken symmetries and their associated source charges, it is obvious to assume that in the geometric structure itself a kind of intelligence should be contained. Otherwise such extreme complex system as the human body would not be possible.

All molecules in the body are able to „feel“ itself via the broken symmetries and the associated potential flows. In this way a permanent communication between all source charges exists. Since there are so many source charges in the human body the asymmetries cross each other and therefore complex interferometries occur in space-time.

These interferometries are like a geometrical fingerprint that describes a quality of geometric intelligence, which has the ability to connect all atoms in the body and to organize all molecules and bigger hierarchical structures in the right way. From the view of the author intelligence develops from this geometry.

The density of the potential flow from a source charge decreases with distance squared. What does not decrease with distance squared are certain crossing and junction points. They can also appear at a greater distance from the source charges. These junction points represent a deficiency or a compacting of the potential flows. These phenomena are like an attractor or a donor characteristic of space-time. In both cases space-time is more asymmetric. Should there be a source charge in the direct proximity of such a junction point, then a force occurs towards that junction point or away from it. A directing of the spin is also conceivable.

When the broken symmetries cross, then there is automatically a recursive feedback cycle in connection with the potential flows. As soon as the potential flow of one source charge hits another source charge, then that usually means, that the potential flow of that source charge also touches the first source charge. That is why all source charges are informed when the position of one source charge changes. Even if there is a change in position of only one source charge within the body then the interferometries of the potential flows changes everywhere in space-time. In this way all atoms and molecules communicate with the speed of light and every source charge knows at any moment* where every other source charge is. Therefore this is a kind of Internet of extreme efficient kind.

* If there is such a fast information transfer in the body, then there should be some evidence that it is so. An interesting observation, which supports the above hypothesis, is that a stimulation of certain acupuncture points at the foot can cause a very fast reaction in the visual cortex. The information transfer is at least 1000 times as fast as any known transmission in nerves. Dr. Joie P. Jones who did the measurements says that the fMRI measurement needs about 80 microseconds to respond to the reactions. So the actual transmission in the body is most likely even faster.

(Dr. Joie P. Jones, public lecture at the Society for Scientific Exploration Meeting, La Jolla, California, June 2001, Infinite Energy Magazine, Issue 48)

Geometric Intelligence and the DNA

The interfering potential flows (geometric intelligence or geometric fingerprint) which exist in space-time and are also radiated from the DNA represent a guideline and building plan for the organization of all molecules in the body.

One example, which supports this idea, is the folding process of proteins. A protein develops in a series of processes. First the DNA double-strand molecule splits in a certain area. At a single strand a m-RNA will be developed. After that the m-RNA is processed in several steps into an amino acid strand, which can fold into a protein.

This amino acid strand, which folds into a protein is big and complex. That is why there are a lot of possibilities for the folding process to develop. Despite the fact that there are so many possibilities, the amino acid strand folds within a split second into precisely that protein which was originally designated by the DNA.

So far the mechanism for the precise and very fast folding of the amino acid strand has not yet been fully understood. A possible explanation could be that the geometric fingerprint which exists in space-time is like a guideline that helps to position the molecular arrangement of the amino acids. That would also mean that the folding process possibly does not only take place via energy minima and not every protein receives the form which is expected due to the lowest enthalpy.

The geometric intelligence which is radiated from all source charges within and outside our body is like a master plan which determines how the body will be designed. The quality of the geometric intelligence defines the capacity of creation.

The radiation from the source charges does proceed far beyond the materialistic surface of the human body. The radiations from the source charges of the objects for example in our living room are also permanently present and cannot be switched off. That is the reason why the geometry of the architecture and material composition of the furniture as well as all objects in our environment influences our well-being and health. This influence can be positive, neutral or negative. The human intuition is usually a good measuring instrument to evaluate which architecture etc. has a positive influence. Generally all kinds of matter influence each other. A home which is designed following for example the Feng Shui concept contributes to a positive feeling. For this reason the Feng Shui concept is based on the geometric positioning of the furniture and the whole environment.

Evolution and Life

The communication which takes place via the interfering potential flows includes, as mentioned above, a recursive feedback mechanism. This with light speed proceeding recursive flow of information is like a permanent update mechanism which tells all source charges in the body, what happens where and when at any moment in time. This feedback mechanism leads to the situation, in which all molecules and cells etc. become in some way self-aware. The time energy of the quantum vacuum, the potential flow, the recursive feedback mechanism and the geometric intelligence of the source charges, create the phenomenon of self-awareness and intelligence. For this reasons the cells and molecules of the human body must be, also if it is in an abstract way, self-aware.

*„Throwing Einstein for a Loop“ Self-awareness through self-observation
(Physicist Fotini Markopoulou Kalamara, Scientific American, December 2002)*

Furthermore a certain quality of cellular and molecular self-awareness of the body is, from the point of view of the author, precondition for the exceptionally fast and complex evolutionary adoptions. The author does not believe in a superior god, who is decoupled from the human being, or in „intelligent design“, but a mere coincidental Darwinian evolutionary mechanism is also not satisfying to explain the extremely fast and complex adoptions. The authors analog to „intelligent design“ or „divine creation“ is what he has named „geometric intelligence“.

An interesting question which is related to this topic is the question where the boundary is between phenomena which are alive and dead. If the recursive feedback mechanism is responsible for the creation of consciousness then every electron as well as every other source charge should have a kind of self-awareness. In other words: everything is alive.

Morphic Resonance

A British biologist Professor Rupert Sheldrake has researched an information transmission phenomenon which exists between forms of life-forms and between molecules. The particular attribute of this phenomenon is, that the more often a new incident happens the more likely it will be, that this incident happens in the same way.

This phenomenon has been researched in several universities. In one experiment, which was repeated in a similar way by different research groups, rats must learn how to escape from a tank of water. The results of these experiments are presented here in a compendious way.

The rats which were used are from a particular strain that was cultured over several generations in a laboratory. In that experiment rats are put into a water tank. To escape the tank the rats must swim through an illuminated or through a non-illuminated gangway. When a rat swims through the illuminated gangway it receives an electric shock. The left and right gangway was illuminated in an alternate way. The amount of the wrong attempts to escape through the illuminated gangway was counted. The quantity of false attempts to escape shows how long it takes to learn the exercise. As expected, the rats learned after a certain amount of failures that they had to swim through the non-illuminated gangway.

The rats who have learnt the exercise could breed with each other and that was continued over several generations. In every following generation the rats learned their exercise faster. At the beginning the rats needed more than 200 attempts, after the 5th generation they needed 100 and after 30 generations they only need 0 to 5 attempts. A learning process of this kind is known to be passed on by genetic conditioning and through passing the knowledge from parents to child.

Then they discovered a curiosity. Other rats of the same strain, which had nothing to do with the experiment at any time where also tested to undergo this exercise. Also physically these rats had no contact to the tested rats. The testing was carried out after the first experimental series was over. Since any known form of conditioning could be excluded an error rate of approximately 200 faults was assumed. But these rats suddenly also learned that exercise after only 0 to 5 attempts. This observation shows that another medium must exist which transmits experiences between life-forms.

Rupert Sheldrake believes that experiences from life-forms as well as information from other materials are transmitted via so called morphogenetic fields. The effect which these morphogenetic fields then have on other live-forms and other materials is what he calls morphic resonance.

The experiments with the rats alone of course do not prove Sheldrake's hypothesis. But in the mean time the phenomenon of morphic resonance is shown in connection with numerous examples.

There is for example the phenomenon that newly developed substances can change their melting point. One example for this is the synthetically produced D-Penicillamine. The D-Penicillamine was synthesized in the 1940's for the first time and in 1949 it had a melting point of 192 degrees Celsius. In the year 1975 this substance had a melting point of 204 degrees Celsius and in 1989 the melting point was at 212 degrees Celsius. The naturally occurring Penicilline acid was isolated in 1913 for the first time and had at that time as well as today a melting point of 87 degrees Celsius. In Rupert Sheldrake's book „A New Science of Life“ this phenomenon is explained in detail using many examples.

About the cause of Morphic Resonance

Thanks to the „new“ physics, which considers the potentials to be something dynamic instead of being static, it is now possible to start an attempt to describe the physical working principle of morphic resonance. In the year 2009 the author contacted Rupert Sheldrake and has showed him the film „Symmetric electric systems and the energetic exchange with the quantum vacuum“. After that an interesting exchange of e-mails took place. The conversation resulted in an attempt to explain the physical mechanism of morphic resonance.

As mentioned above all source charges (protons-positive and electrons-negative) radiate their electric field into surrounding space-time. If a rat learns a certain exercise for the first time, then that experience will be stored chemically in the brain. As soon as a few molecules change their position and a few molecules are newly produced, then there is an immediate change of the interferometry of the potential flows. A change of that interferometry has an effect on other molecules, meaning that a force is created upon all molecules in the whole body. Due to that, many molecules slightly change their position. The molecules have to match themselves to the new interferometric structure or geometric fingerprint*.

** The human body changes its geometric form all the time, due to the permanent ongoing bloodstream, heartbeat and physical motion. From the view of the molecules these movements present extreme changes in distance. So one could assume, that due to the physical motion of the body no geometric fingerprint can be concretized. But that motion represents no obstacle for the creation of a geometric fingerprint. One must distinguish between the frequency range. Molecules can receive their signal from similar molecules also when they change their position permanently. A related effect is known from mobile phones. The mobile phone can also be moved back and forth, a reception always remains.*

Now not only the complexity of information storage becomes visible but also the cause why the information storage process is accomplished in such a fast way. The brain does not have to produce in a complicated and interminable way for every single information a new chemical. In that case these chemicals first have to be transported to the right place and be positioned in a right way like electrons in a computer.

It is sufficient if only a few molecules change their position to trigger a process which creates a new pattern in the interferometry of the potential flows. This new pattern represents all memories, thoughts, emotions as well as the newly-learned experience.

As soon as the geometric fingerprint receives a new pattern, then the mind can get access to that new memory in a very fast way. When consciousness is founded on the recursiveness of the potential flows, then the mind ideally just has to move the centre of its recursive potential flow (centre of the donut) to a particular single molecule. By changing the position of that molecule in a very small way the mind „donut“ can lock on to the pattern, which is attached to that molecule and see the information and memories therein.

Therefore a new experience is not only stored in the brain but in the whole body. The brain definitely plays a major role in connection with memory storage but basically all source charges represent a unit. It is highly probable that certain groups of proteins use a separate intranet. Other molecules, which have a different geometric shape will use a different intranet. A common television antenna for example will only resonate with a certain frequency range but a mobile phone antenna will resonate with another frequency range. The antenna of the television and the antenna of the mobile phone have a different geometric form.

As soon as a rat learns an exercise, the geometric fingerprint which radiates from all molecules is changed. This new geometric fingerprint will then be radiated at the speed of light into the environment. As soon as a certain amount of rats have learnt that exercise the density of that geometric fingerprint will increase in space-time. If even more rats learn that exercise then at some point a threshold will be reached. As soon as the threshold is overcome the density of the geometric fingerprint is so compressed, that the information will suddenly be assigned to all other rats' brains and bodies. This transmission will cause an immediate learning effect of the information which is contained in that geometric fingerprint. The learning effect will of course only be recognized in that particular strain of rats. Rats of a different race which have a different brain and protein geometry will be less receptively for that geometric fingerprint.

However all life forms on earth use the DNA as a basic element. Since humans and rats have a few similar sections of DNA strands, certain physical similarities exist. Therefore a weak or subliminal transmission of fragments of an experience from rat towards human and the other way around is possible. Due to the very fast radiation of the geometric fingerprint that includes every thought and emotion, these potential flows can also be considered to be the cause for telepathic communication. Telepathic transmissions for example between humans and dogs are known and are well documented. One could go even further and assume that due to the interfering of the potential flows of all source charges from all life forms, every experience from every animal, insect and plant will be transmitted to all other life forms in a more or less intensive way. The more similar the geometric fingerprint of two life forms or two molecules is, the better the transmission. Basically everything influences everything.

It will be a pleasure to see when more and more people become aware of the fact, that all humans form a unit also thanks to the morphogenetic fields and the morphic resonance. Hopefully one day positive thoughts, emotions and especially a consciousness of humanity and compassion will prevail, because we are all connected with each other.